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BOROUGH



OF LUTON

# ANNUAL REPORT

of the

Medical Officer of Health

and the

Chief Sanitary Inspector

FOR THE YEAR 1948

and the report of the Divisional Medical Officer  
for the period 5th July—31st December, 1948

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# BOROUGH



# OF LUTON

## CONTENTS

	<i>Pages</i>
Introduction ... ..	3
Statistics and Social Conditions of the Area ... ..	7
General Provision of Health Services for the Area ... ..	17
Report of the Chief Sanitary Inspector ... ..	27

## APPENDICES

I	Premature Infants ... ..	52
II	Illness in Early Childhood in the Borough ... ..	53



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Public Health Department,  
Town Hall,  
LUTON.

*January, 1949.*

His Worship the Mayor, Aldermen and  
Councillors of the Borough of Luton.

Ladies and Gentlemen,

During 1948, an eventful year in British social legislation, the administration of medical services was remoulded to an extent without previous parallel.

Public health services were no exception. On July 5th, as you are aware, personal health services formerly administered by the Borough Council were transferred to other bodies. The Spittlesea Isolation Hospital and the Borough Maternity Institutions became the responsibility of the North-West Metropolitan Regional Hospital Board, administering groups of hospitals through Local Management Committees. Other personal health services—domiciliary midwifery, child welfare, health visiting—became the responsibility of the Bedfordshire County Council, under the day-to-day control of a Divisional Committee on which the Luton Borough Council has representation. The health services which remain under the control of the Borough Council are, therefore, few in number. They are virtually restricted to environmental hygiene, certain aspects of the control of infectious diseases, the preparation of local statistics, and some aspects of health education.

It would serve no useful purpose to comment at length on the implications of these changes for the Health Department and the Local Authority, but it is appropriate that the Council should be reminded of the extensive development of health services for which they have been responsible for many years.

In 1936, a small municipal laboratory established in 1935 in the old Health Department was transferred to well-equipped premises in the newly built Town Hall. In 1936 also, a Borough Maternity Hospital of 25 lying-in beds was opened; the Spittlesea Isolation Hospital was modernised and extended; and the Borough Council became the local supervising authority under the Midwives Acts and established a comprehensive domiciliary maternity service. In 1938 two new buildings came into use as clinics in connection with the School Medical Service and Maternity and Child Welfare. During the war, six nurseries were developed, the institutional maternity service was greatly expanded and a lecture theatre for health educational purposes provided by the adaptation of existing premises in the centre of the town (Napier Road).

The magnitude of these developments is indicated by the rate at which the staff of the Health Department and expenditure on health services grew. In 1935 the establishment of the Department was 45, including two medical officers; ten years later it was 220, including seven whole-time and a number of part-time medical officers. Gross expenditure on health



services in 1935 was £16,700 ; in 1947, £101,000. The Council will feel a natural regret about the loss of services they built up and administered over a period of years, a regret legitimately tempered, however, with pride. Had it not been for their initiative there would have been little to transfer, and the mature services recently handed over will, of course, continue to be available mainly for the benefit of Luton citizens.

Regrettably, the future of the Borough Council as a unit of Local Government is still unknown ; the future structure of Local Government in general is uncertain. It is a matter for genuine concern, that the Government has not yet been able to make any pronouncement on the recommendations of the Local Government Boundary Commission, published early in 1948. These circumstances coupled with the denudation of the Council's functions have combined to engender a sense of frustration and an apathy which have clouded the outlook of the Council and its senior officers.

So far as the Health Department is concerned—and it does not stand alone—losses of senior personnel on a big scale have added to the difficulties. On the 31st December, the Council's Dental Service came to an end when the last remaining dental surgeon left to engage in private practice. The Senior Administrative Officer and the Chief Clerk to the Health Department both secured advancements during the year by taking up positions in the new hospital service. There were more losses of health visitors, and all attempts to recruit new health visitors came to naught. It is not too much to say that, with the exception of facilitating the transfer of services, the major effort of the year has been directed to maintaining the morale of the Department—and, indeed, of the Health Committee—and to holding the Department together to play its part in the new administration.

With this object, discussions have been held at intervals with sections of the department's staff, and a successful week-end course of lectures and discussions for the entire Department was held early in October.

It has been possible also to complete another year of an investigation into illness in childhood begun in 1945. A report on the results for the first two years of life, compiled by Dr. R. M. Dykes, Mr. Richard Titmuss and myself is printed as an appendix to this Annual Report (Appendix II). The investigation is, of course, a piece of work in which the whole department has shared, and great credit is due to Health Visitors, Sanitary Inspectors and Clerical staff for the efforts they have made.

The changes in administration are reflected by the form of this report. It contains, it will be noted, statistics relating to the work of the Divisional Medical Officer for the Borough of Luton as well as those properly included in the Report of the Medical Officer of Health. This arrangement has been followed with the concurrence of the County Medical Officer of Health, both as a matter of convenience and for the purpose of securing continuity of records. The report also contains statistics relating to the Isolation Hospital and the Maternity Institutions for the whole year—institutions for which the Borough Council ceased to be responsible on July 5th. These statistics will not appear in future reports.

At the executive level, excepting the loss of hospital administration, the apportionment of functions between the Borough Council and the

County Council has made little difference to departmental organisation. In part, this is attributable to a generous recognition by the County Council that until such time as the future status of the Borough is known it is wise to preserve an administrative nucleus related to Health Services in the Borough. It is due no less to happy personal relations between the staff of the County Health Department and local staff. Credit for the smooth working of divisional administration is due to these factors.

Over a long period there is little doubt that the divisional scheme as it stands would destroy local interest in local affairs. The most serious immediate criticism is that it has produced an increasing preoccupation with the mere machinery of administration. It is perhaps a commentary on the times in which we live that an increasing proportion of departmental time is absorbed in the preparation of reports and returns, and with questions relating to the status, salaries and conditions of service of personnel. This state of affairs may to some extent be transitory. Everyone hopes it will, for there is little satisfaction to be gained from it.

### **General Statistics and Infectious Disease**

The civilian population for mid-1948 was estimated by the Registrar-General to be 109,590. Thus, the increase over the previous year fell short of the natural increment of births over deaths, and it appears that the population of the Borough is tending to stabilise at a level of about 110,000.

The birth rate for 1948 was lower than for many years. After reaching peak figures of 22.7 and 21.3 in 1944 and 1947 respectively, it fell in 1948 to 17.4 per thousand of population.

Infantile mortality reached a new low level of 27 per thousand live births. This figure is provisional and may require slight amendment, but it can be taken as accurate for all practical purposes. Luton can now count itself as being amongst the most favoured industrial towns in the country—and, indeed, in the world. The rate is approaching a level on which little further improvement can be expected in the existing state of knowledge and social development.

The stillbirth rate also was low, remaining at 21.3 per thousand total births as compared with a rate of 21.1 for the previous year (the lowest ever recorded).

The common notifiable infectious diseases accounted for only two deaths, one from cerebro-spinal fever and one from whooping cough. Whooping cough and measles were both prevalent during the year. Scarlet fever in a mild form occurred sporadically with almost the same incidence as in 1947. Only two cases of diphtheria were notified, and there was no death from this cause. Although it cannot be said that infantile paralysis reared its head in epidemic form during 1948 as it did in 1947, it is nonetheless somewhat disquieting that eight proven cases occurred during the year. Their occurrence was spread over the four seasons, and four deaths from poliomyelitis and polioencephalitis were recorded,



## Divisional Health Functions

It is too early to comment at any length on changes arising out of the new administration. The most important new services established in the Borough under Local Government control are the Home Nursing Service and the Home Help Service. Both have run smoothly, and though it cannot be said in the case of the Home Help Service that the full potential demand has been met, neither service has been unduly strained. Details of these services are given on pp. 16 and 18 of the Report, and it will be noted that a great deal of the time of home nurses was devoted to the care of persons of advanced years.

In December, every municipal midwife was provided with a portable gas and air apparatus, and arrangements made for their delivery to patients' homes until such time as every midwife is provided with a car of her own. It can be expected, therefore, that the administration of gas and air analgesia to women in their homes will now become a general practice.

I should like to place on record my appreciation of the way in which the entire staff of the Health Department have risen to an occasion of considerable difficulty, and to thank the Public Health Committee for their continuing support during another year of reorganisation and uncertainty.

I have the honour to be,

Your obedient servant,

F. GRUNDY,  
*Medical Officer of Health.*



# STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

## GENERAL STATISTICS.

Area (from 1st April, 1939)	...	...	...	...	8,736 acres
Population (Census, 1931)	...	...	...	...	68,523
Registrar-General's Estimate for mid-1948 (Provisional)					109,590
Number of inhabited houses, 1st April, 1948	...	...			29,464
Rateable value (1st April, 1948) unreduced	...	...			£859,536
Rateable value (1st April, 1948) reduced	...	...	...		£743,339
Sum represented by Penny Rate (est. 1948-49)	...	...			£3,065

## EXTRACTS FROM VITAL STATISTICS FOR THE YEAR 1948

			<i>Total</i>	<i>Males</i>	<i>Females</i>
Notified live births	Legitimate	...	2,198	1,160	1,038
	Illegitimate	...	121	63	58
	All	...	2,319	1,223	1,096
Notified stillbirths	Legitimate	...	55	27	28
	Illegitimate	...	2	2	—
	All	...	57	29	28
Total Live and Stillbirths (Notified)			2,376	1,252	1,124
Stillbirth Rate per 1,000 total (live & still) births*			...	...	21.3
Registered live births*			1,885		
Live Birth Rate per 1,000 of estimated resident population (provisional)					17.4
			<i>Total</i>	<i>Males</i>	<i>Females</i>
Registered Deaths*			974	515	459
Death rate per 1,000 estimated resident population			...	...	9.1
Death from Puerperal Causes (Headings 29 and 30 of Registrar-General's short list) :—					

	<i>Deaths</i>	<i>Rate per 1,000 registered total births</i>
No. 29 Puerperal Sepsis	—	—
No. 30 Other Puerperal causes	3	1.5
Total	3	1.5

## Death Rates of Infants under 1 year of age :—

All Infants per 1,000 registered live births (provisional)	...	27
Legitimate per 1,000 legitimate live births (provisional)	...	28
Illegitimate per 1,000 illegitimate live births (provisional)		22

\* Corrected for inward and outward transfers.

TABLE 1

BIRTH RATES, DEATH RATES, ANALYSIS OF MORTALITY,  
MATERNAL DEATH RATES AND CASE RATES FOR CERTAIN  
INFECTIOUS DISEASES IN THE YEAR 1948

(England and Wales, London, 126 Great Towns and 148 Smaller Towns)  
(Provisional figures based on Weekly and Quarterly Returns)

(Gummed slip to follow)

TABLE 1.

BIRTH RATES, DEATH RATES, ANALYSIS OF MORTALITY, MATERNAL  
DEATH RATES AND CASE RATES FOR CERTAIN INFECTIOUS DISEASES  
IN THE YEAR 1948

(England and Wales, London, 126 Great Towns and 148 Smaller Towns)  
(Provisional figures based on Weekly and Quarterly Returns)

	LUTON	ENGLAND AND WALES	126 County Boroughs and Great Towns including London	148 Smaller Towns (Resident Population 25,000 to 50,000 at 1931 Census)	London Administrative County
	* Rates per 1,000 Civilian Population				
Births :					
Live ... ..	17.5	17.9‡	20.0	19.2	20.1
Still ... ..	0.36	0.42‡	0.52	0.43	0.39
Deaths :					
All causes ... ..	9.1	10.8‡	11.6	10.7	11.6
Typhoid and Paratyphoid Fevers	—	0.00	0.00	0.00	0.00
Whooping Cough ... ..	0.01	0.02	0.02	0.02	0.01
Diphtheria ... ..	—	0.00	0.00	0.00	0.01
Tuberculosis ... ..	0.42	0.51	0.59	0.46	0.63
Influenza ... ..	0.01	0.03	0.03	0.04	0.02
Smallpox ... ..	—	—	—	—	—
Acute Poliomyelitis and Polioencephalitis ... ..	0.03	0.01	0.01	0.01	0.00
Pneumonia ... ..	0.34	0.41	0.38	0.36	0.54
	Rates per 1,000 live births				
Deaths under 1 year of age ... ..	28	34†	39	32	31
Deaths from Diarrhoea and Enteritis under 2 years of age ... ..	2.1	3.3	4.5	2.1	2.4
	Rates per 1,000 Civilian Population				
Notifications :					
Typhoid Fever ... ..	—	0.01	0.00	0.01	0.00
Paratyphoid Fever ... ..	0.01	0.01	0.01	0.01	0.01
Cerebro Spinal Fever ... ..	0.04	0.03	0.03	0.02	0.03
Scarlet Fever ... ..	1.70	1.73	1.90	1.82	1.37
Whooping Cough ... ..	3.58	3.42	3.51	3.31	3.13
Diphtheria ... ..	0.02	0.08	0.10	0.09	0.10
Erysipelas ... ..	0.13	0.21	0.23	0.21	0.22
Smallpox ... ..	—	—	—	—	—
Measles ... ..	9.88	9.34	9.75	8.84	9.17
Pneumonia ... ..	0.35	0.73	0.84	0.60	0.57
Acute Poliomyelitis ... ..	0.07	0.04	0.05	0.04	0.04
Acute Polioencephalitis ... ..	0.01	0.00	0.00	0.00	0.00
	Rates per 1,000 Total Births (Live and Still)				
(a) Notifications :					
Puerperal Fever ... ..	18.53	6.89	8.90	4.71	{ 0.61 ø7.34
Puerperal Pyrexia ... ..					
(b) Maternal Mortality :					
Puerperal Infection (No. 147) ...	1.03	{ 0.13 0.11	Not available		
Abortion with Sepsis (No. 140) ...					
Abortion without Sepsis (No. 141)	—	{ 0.05 0.73			
Others ... ..					
Total ... ..	1.03	1.02			

\* A dash (—) signifies that there were no deaths or notifications.

† Per 1,000 related births.

‡ Rates per 1,000 total population.

ø Including Puerperal Fever.



TABLE 3. DEATHS OF LUTON RESIDENTS DURING THE YEAR 1948

CAUSE OF DEATH	All Ages	Under 4 weeks	1 month to 1 year	Total under 1 year	1-5	5-10	10-15	15-25	25-35	35-45	45-55	55-65	65-75	75+
1. Typhoid and Paratyphoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Cerebro-spinal Fever ...	1	—	1	1	—	—	—	—	—	—	—	—	—	—
3. Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4. Whooping Cough ...	1	—	—	—	1	—	—	—	—	—	—	—	—	—
5. Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6. Tuberculosis of Respiratory System ...	46	—	—	—	—	—	5	9	10	7	8	7	—	—
7. Other forms of Tuberculosis ...	5	—	—	—	1	—	3	—	—	1	—	—	—	—
8. Syphilitic Disease ...	3	—	—	—	—	—	—	—	—	3	—	—	—	—
9. Influenza ...	2	—	—	—	—	—	—	—	—	1	—	—	—	1
10. Measles ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11. Acute Poliomyelitis and Polio-encephalitis ...	4	—	1	1	—	—	—	2	1	—	—	—	—	—
12. Acute Infectious Encephalitis ...	4	—	—	—	—	—	—	—	—	1	—	2	—	—
13M. Cancer of Buccal Cavity and Oesophagus ...	4	—	—	—	—	—	—	—	—	—	2	—	—	2
13F. Cancer of Uterus ...	15	—	—	—	—	—	—	—	—	—	6	4	3	3
14. Cancer of Stomach and Duodenum	26	—	—	—	—	—	—	—	1	1	8	10	4	4
15. Cancer of Breast ...	22	—	—	—	—	—	—	1	2	3	2	6	6	6
16. Cancer of all other sites	120	—	—	—	—	—	—	2	9	18	25	43	23	23
17. Diabetes ...	5	—	—	—	—	—	—	—	—	—	—	2	3	3
18. Intra-cranial Vascular Lesions ...	104	—	—	—	—	—	—	1	—	10	14	34	45	45
19. Heart Disease ...	291	—	—	—	—	1	2	1	2	17	45	104	119	119
20. Other Diseases of the Circulatory System ...	15	—	—	—	—	—	—	—	—	1	2	6	6	6
Carried forward ...	668	—	2	2	2	1	2	8	16	25	66	116	218	212

## DEATHS OF LUTON RESIDENTS DURING THE YEAR 1948 (continued)

CAUSE OF DEATH		All Ages	Under 4 weeks	1 month to 1 year	Total under 1 year	1-5	5-10	10-15	15-25	25-35	35-45	45-55	55-65	65-75	75+
Brought forward	...	668	—	2	2	2	1	2	8	16	25	66	116	218	212
21. Bronchitis ...	...	29	—	—	—	—	—	1	1	1	—	3	4	6	13
22. Pneumonia ...	...	40	2	11	13	1	—	1	—	2	2	1	5	8	7
23. Other Respiratory Diseases	...	13	—	—	—	—	1	—	—	—	1	6	3	1	1
24. Ulceration of the Stomach or Duodenum ...	or	8	—	—	—	—	—	—	—	—	—	4	2	2	—
25. Diarrhoea (under 2 years)	...	4	—	3	3	1	—	—	—	—	—	—	—	—	—
26. Appendicitis ...	...	2	—	—	—	—	1	—	—	—	—	—	—	1	—
27. Other Digestive Diseases	...	23	—	—	—	—	—	—	—	3	1	4	5	6	4
28. Nephritis ...	...	32	—	—	—	—	—	—	2	1	4	4	1	9	11
29. Puerperal and Post Abortive Sepsis ...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30. Other Maternal Causes	...	3	—	—	—	—	—	—	—	1	2	—	—	—	—
31. Premature Birth ...	...	13	13	—	13	—	—	—	—	—	—	—	—	—	—
32. Congenital Malformations, Birth Injury, Infantile Disease	...	21	13	7	20	1	—	—	—	—	—	—	—	—	—
33. Suicide ...	...	10	—	—	—	—	—	—	2	1	—	3	3	1	—
34. Road Traffic Accidents	...	11	—	—	—	3	—	1	1	1	1	—	1	2	1
35. Other Violent Causes	...	18	—	—	—	2	—	—	2	4	4	1	1	—	4
36. All Other Causes	...	79	—	1	1	1	2	3	1	1	6	5	8	11	40
Totals	...	974	28	24	52	11	5	8	17	31	46	97	149	265	293

TABLE 4  
NOTIFIED INFECTIOUS DISEASES, 1948 Civilian (Corrected in cases of revised diagnosis)

	Under 1 year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-35	35-45	45-65	Over 65	TOTAL
Scarlet Fever	2	6	10	14	15	88	32	7	—	5	3	3	—	185
Diphtheria	1	—	—	—	—	—	—	—	—	1	—	—	—	2
Whooping Cough	41	51	63	71	51	105	2	—	1	2	2	—	—	389
Measles	38	159	136	162	166	389	11	2	3	3	2	1	—	1072
Pneumonia	3	2	2	—	—	1	2	3	2	5	4	9	5	38
Anterior Poliomyelitis	—	—	2	2	1	2	—	—	—	—	1	—	—	8
Paratyphoid Fever	—	—	—	1	—	1	—	—	—	—	—	—	—	2
Polioencephalitis	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Dysentery	—	—	—	5	10	3	—	—	—	3	—	1	—	22
Ophthalmia Neonatorum	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Puerperal Pyrexia	—	—	—	—	—	—	—	4	16	11	5	—	—	36
Cerebro Spinal Fever	1	—	—	1	1	1	1	—	—	—	—	—	—	5
Erysipelas	—	—	—	—	—	—	—	—	1	1	3	8	1	14
Jaundice	—	—	1	—	1	8	2	3	2	4	2	—	4	27
Totals	88	218	214	256	245	598	50	19	25	35	22	22	10	1802



## DIPHTHERIA IMMUNISATION

Number of clinics held	...	...	...	...	...	...	27
Total number of attendances	...	...	...	...	...	...	3,193
Number of children who have completed course...	...	...	...	...	...	...	1,524
Number of children immunised by general practitioners	...	...	...	...	...	...	235
Number of children immunised at nurseries	...	...	...	...	...	...	25
Total number immunised	...	...	...	...	...	...	1,784
Number of re-inforcing sessions at schools	...	...	...	...	...	...	4
Re-inforcing courses	...	...	...	...	...	...	303

TABLE 5

Number of Children who had completed a full course of Immunisation at any time up to 31st December, 1948.

(According to Health Department Records)

Age at 31.12.48	Under 1 year	1 year	2 years	3 years	4 years	5 to 9 years	10 to 14 years	Total under 15
Number Immunised	0	1,600	1,197	1,133	1,224	5,185	5,208	15,547
Estimated mid-year population, 1948	9,909					15,220		25,129

*Under  
5 years*

*Between 5  
and 15 years*

Estimated percentage of the child population immunised at 31st December, 1948 ...

52%

68%

(a) Number of cases of diphtheria in children under 15 years of age notified during the year ...

1

(b) Number of cases included in (a) in which the child is known to have completed the course of immunisation not less than 12 weeks before the onset of the disease

0

(c) Number of deaths from diphtheria registered in the Authority's area during the year, of children under 15 years of age ...

0

(d) Number of deaths included in (c) in which the child is known to have completed the course of immunisation not less than 12 weeks before the onset of the disease ...

0

## VACCINATION

(Divisional Committee, 5th July to 31st December, 1948)

	Under 1 year	1-4 years	5-14 years	15 years and over	Total
Primary vaccination ...	93	6	6	16	121
Re-vaccination ...	—	1	3	36	40
Totals ...	93	7	9	52	161

## DIPHTHERIA IMMUNISATION.

DEATHS FROM DIPHTHERIA ARE SHOWN IN BRACKETS ON GRAPH.  
PERCENTAGE OF IMMUNISED POPULATION 0-15 YEARS IN BRACKETS  
AT FOOT OF GRAPH.

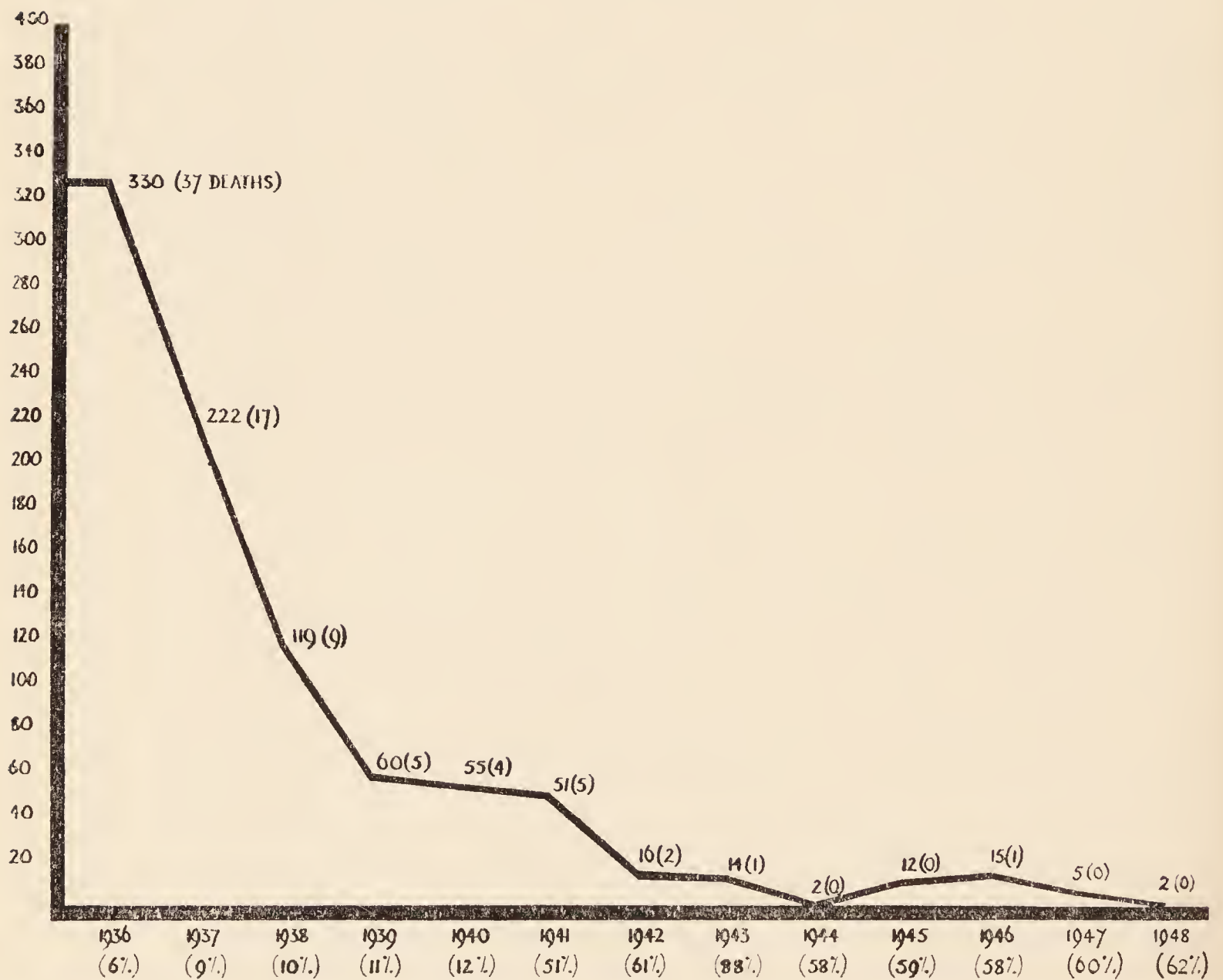


TABLE 6

PARTICULARS OF NEW CASES OF TUBERCULOSIS AND ALL  
DEATHS FROM THE DISEASE DURING 1948

Age Periods	New Cases				Deaths			
	Pulmonary		Non- Pulmonary		Pulmonary		Non- Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	—	—	—	—	—	—	—	—
1 "	4	2	3	1	—	—	1	—
5 "	7	7	—	—	—	—	—	—
10 "	3	3	2	—	—	—	—	—
15 "	6	12	2	1	—	2	1	1
20 "	10	22	3	1	1	2	—	1
25 "	21	16	1	1	7	2	—	—
35 "	16	5	3	—	6	4	—	—
45 "	7	2	1	—	4	3	1	—
55 "	4	3	1	—	8	—	—	—
65+	3	1	1	—	5	2	—	—
Age unknown	—	—	—	—	—	—	—	—
Totals ...	81	73	17	4	31	15	3	2

TABLE 7

DISTRIBUTION OF NOTIFIED TOTAL BIRTHS AS BETWEEN  
INSTITUTIONAL AND DOMICILIARY CONFINEMENT

Uncorrected for Outward Transfers

Year	Institutional					Domiciliary				Grand Total
	B.M.H.	Em. Unit	P.A.I.	Private Nsg. Home	Total	Mun. M/W	Notified by		Total	
							Private M/W	Dr. & Parents		
1938	540	—	26	172	738	477	271	210	958	1,696
1939	568	84	38	166	856	583	131	109	823	1,679
1940	588	175	21	194	978	674	—	106	780	1,758
1941	583	504	46	216	1,349	463	—	162	625	1,974
1942	576	681	58	329	1,644	508	3	196	707	2,351
1943	533	535	115	467	1,650	451	1	224	676	2,326
1944	631	699	190	508	2,028	534	39	156	729	2,757
1945	610	621	114	476	1,821	407	50	62	519	2,340
1946	667	678	215	582	2,142	397	—	95	492	2,634
1947	667	616	329	572	2,184	571	—	79	650	2,834
1948	658	596	288	371	1,913	402	—	61	463	2,376



TABLE 8.  
STILLBIRTHS.‡

Cause	B.M.H.	Em. Unit	L. & D.H.	St. Mary's Hosp.	Doctor	Midwife	Nursing Home	Total
Maternal Toxæmia	7	2	—	—	—	—	1	10
Chronic Maternal Disease ...	—	1	—	—	—	—	—	1
Foetal malforma- tion ...	5*	5*	—	2†	1	—	—	13
Prematurity ...	—	1	—	—	—	—	—	1
Complications of labour ...	8	5	—	1	—	4	5	23
Other ...	4	—	—	1	—	—	—	5
Total ...	24	14	—	4	1	4	6	53

‡ Excluding outcome of multiple pregnancies.

\* 2 Macerated.

† 1 Macerated.

#### OPHTHALMIA NEONATORUM

(a) Number of cases notified during the year ...	...	...	...	...	1
(b) Number of cases visited by officers of the Council ...	...	...	...	...	1
(c) Number of cases removed to hospital ...	...	...	...	...	Nil
(d) Number of cases for whom home nursing was provided by the Council ...	...	...	...	...	1
(e) Number of cases in which vision was impaired ...	...	...	...	...	Nil

## GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

### BACTERIOLOGICAL AND SANITARY WORK

(By courtesy of the Director of the Medical Research Council Laboratory)

1948

Nose and Throat Swabs	...	...	...	7,180
Faeces and Urine	...	...	...	1,251
Sputum	...	...	...	245
Water	...	...	...	532
Milk	...	...	...	936
Ice-cream	...	...	...	370
Food	...	...	...	63
Miscellaneous	...	...	...	1,212
Total	...	...	...	11,789

### PROFESSIONAL NURSING IN THE HOME

On 5th July, 1948, the Bedfordshire County Council became responsible for providing a service of home nursing throughout the county. In Luton the nursing personnel of the Luton District Nursing Association were taken over and in common with certain other services placed under the day-to-day supervision of the Divisional Committee for the Borough. Particulars of the work undertaken by this service during the period 5th July to 31st December, 1948, are given in the following tables.

### PROFESSIONAL NURSING IN THE HOME.

(Divisional Committee)

For the period 5th July to 31st December, 1948.

TABLE 9.

### NUMBER OF CASES ATTENDED.

	District									All
	1	2	3	4	5	6	7	8	9	
Acute medical	12	18	19	21	21	40	12	22	7	172
Chronic medical ...	48	32	32	20	53	19	13	33	20	270
Surgical ...	25	17	8	8	29	27	16	17	9	156
Infectious disease ...	—	—	—	—	—	—	—	—	—	—
Abortion ...	—	1	—	3	1	4	1	1	1	12
Other ...	2	1	1	—	1	4	—	2	1	12
Totals ...	87	69	60	52	105	94	42	75	38	622

TABLE 10.  
NUMBER OF VISITS.

	District									All
	1	2	3	4	5	6	7	8	9	
Acute medical	104	161	58	248	94	217	118	109	42	1,151
Chronic medical ...	888	426	840	753	1,063	517	890	1,307	350	7,034
Surgical ...	638	200	262	245	314	334	445	345	389	3,172
Infectious disease ...	—	—	—	—	—	—	—	—	—	—
Abortion ...	—	1	—	16	5	17	7	4	4	54
Other ...	7	2	1	—	5	71	—	4	3	93
Totals ...	1,637	790	1,161	1,262	1,481	1,156	1,460	1,769	788	11,504

TABLE 11.  
CASES ATTENDED BY TYPE, AGE AND SEX.

Type of Case	Male						Female						All
	Ages in years						Ages in years						
	0-4	5-14	15-24	25-44	45-64	65-	0-4	5-14	15-24	25-44	45-64	65-	
Acute Medical	10	10	1	9	11	29	8	12	10	17	15	40	172
Chronic Medical	—	1	—	4	20	45	—	2	—	14	39	145	270
Surgical...	11	4	1	6	15	34	3	—	6	14	27	35	156
Infectious Disease	—	—	—	—	—	—	—	—	—	—	—	—	—
Abortion	—	—	—	—	—	—	—	—	4	7	1	—	12
Other ...	1	1	—	—	2	—	1	—	1	2	2	2	12
Totals ...	22	16	2	19	48	108	12	14	21	54	84	222	622

TABLE 12.  
DURATION OF NURSING CARE. (Completed cases only)

Type of Case	7 days or less	8-28 days	1-3 months	3-6 months	Over 6 mths.	All
Acute Medical ...	79	29	9	1	—	118
Chronic Medical ...	45	29	27	10	1	112
Surgical ...	39	23	15	5	1	83
Infectious Disease ...	—	—	—	—	—	—
Abortion ...	7	4	—	—	—	11
Other ...	7	—	—	—	—	7
Totals ...	177	85	51	16	2	331



# HOME HELP SERVICE.

(Divisional Committee)

For the period 5th July to 31st December, 1948.

Number of full-time home helps on books at the end of the period	19
Number of part-time home helps on books at the end of the period	23
Number of householders helped during the period :	
(a) Maternity cases ... ..	158
(b) Other cases ... ..	1,532
	Total ... 1,690
Number of hours of assistance provided during the period :	
(a) Maternity cases ... ..	4,124 $\frac{3}{4}$
(b) Other cases ... ..	17,655 $\frac{1}{4}$
	Total ... 21,780
Number of home help hours available ... ..	24,583 $\frac{1}{2}$
Number of cases in which full fee was not charged ... ..	476
Cost to local authority of assessed cases ... ..	£371 13s. 4d.

## CLINICS AND TREATMENT CENTRES

No change.

TABLE 13.

## NUMBER OF ATTENDANCES AT ANTE-NATAL CLINICS DURING THE YEAR 1948.

1948	Maternity Hospital		Beechwood Health Centre		Total Att'ces	Post- Natal Clinic Total Attends	School for Mothers Total Attends
	First Attends	Subs. Attends	First Attends	Subs. Attends			
January ... ..	1	395	161	628	1,185	63	28
February ... ..	1	281	113	672	1,067	38	45
March ... ..	—	234	119	729	1,082	50	29
April ... ..	1	307	148	756	1,212	54	24
May ... ..	4	264	98	689	1,055	53	52
June ... ..	2	236	128	739	1,105	73	35
July ... ..	—	244	113	705	1,062	58	52
August ... ..	3	295	166	695	1,159	34	53
September ... ..	4	425	182	732	1,343	45	30
October ... ..	—	365	118	826	1,309	49	63
November ... ..	—	324	157	906	1,387	61	87
December ... ..	—	437	102	709	1,248	89	63
Totals ... ..	16	3,807	1,605	8,786	14,214	667	561

TABLE 14.

NUMBER OF CONSULTATIONS, WEIGHINGS, ETC., AT INFANT WELFARE CENTRES, DURING THE YEAR 1948.

	Number of Sessions	Attendances				Medical Officer's Consultations	
		0-1 years		1-5 years		Under 1 year	1-5 years
		1st	Sub.	1st	Sub.		
Dallow Road ...	48	255	2,902	40	419	467	221
Stopsley ...	48	99	1,433	15	514	189	136
Leagrave High St.	47	63	1,087	7	280	217	78
Leagrave Marsh Road ...	53	115	1,880	9	446	303	153
Round Green ...	103	322	4,598	6	971	440	200
Castle Street ...	105	300	3,736	30	844	590	171
Beechwood ...	104	273	4,938	19	808	443	179
Limbury ...	102	208	2,852	12	486	361	188
Totals ...	611	1,635	23,426	138	4,768	3,010	1,326

#### Other Clinics.

	<i>First Attendances</i>	<i>Subsequent Attendances</i>	<i>Total</i>
Orthopaedic clinic (children under 5 yrs.)	26	174	200
Contraceptive clinic (28 sessions) ...	106	370	476
Dental clinic (53 sessions) :			
Children under 5 years ...	172	204	376
Nursing and expectant mothers ...	82	480	562
Ophthalmic clinic (children under 5 yrs.)	68	330	398

#### NATIONAL SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN.

During the year 1948 the Inspectors were responsible for dealing with 18 cases on behalf of the Department.

TABLE 15.

#### HOME VISITS BY HEALTH VISITORS.

	Children under 1 year		Children 1-5 years		Expectant Mothers		Special Visits Infectious Disease, etc.	Infant Life Protection	Total Visits
	First Visits	Re-Visits	First Visits	Re-Visits	First Visits	Re-Visits			
1941 ...	1,963	5,008	112	8,583	—	219	5,422	131	21,438
1942 ...	2,203	5,698	273	7,765	—	56	8,665	65	24,725
1943 ...	1,986	8,594	45	8,603	—	238	4,997	203	24,666
1944 ...	2,760	7,981	173	7,451	—	171	3,980	288	22,804
1945 ...	2,608	6,233	183	8,399	—	66	3,417	489	21,395
1946 ...	2,394	4,948	181	7,744	60	19	4,352	250	19,948
1947 ...	2,832	4,194	359	7,072	68	—	4,439	119	19,083
1948 ...	2,167	3,780	224	7,037	41	—	4,386	122	17,757

## CLEANSING OF PERSONS

Total attendances at central clinic ... ..	1,156
Number of heads cleansed ... ..	426
Number of individual cases of scabies treated during the year ...	98

PUBLIC HEALTH ACT, 1936, PART VII.  
CHILD LIFE PROTECTION.

Number of persons who were receiving children for reward from 1st January to 4th July, 1948 ... ..	7
Number of children :	
(a) At the end of the period ... ..	8
(b) Who died during the period ... ..	—
(c) On whom inquests were held during the period ...	—
Number of child protection visitors at the end of the year who were :	
(a) Health visitors... ..	1
(b) Female, other than health visitors ... ..	—
(c) Male ... ..	2

## ADMINISTRATION OF THE MIDWIVES' ACTS.

## Distribution of Midwives, 31st December, 1948.

(a) Private Practice (Independent) ... ..	1
(b) Municipal Midwives ... ..	7
(c) In Private Nursing Homes ... ..	8
(d) Public Assistance Institution ... ..	12
(e) Borough Maternity Hospital ... ..	19

TABLE 16.

## NOTIFICATIONS RECEIVED FROM MIDWIVES.

	Nursing Homes	Muni- cipal Mdwves.	P.A.I.	Mat. Hosp. & Ext.	Inde- pendent Practice	Total
(a) Intention to practice ...	8	8	14	19	1	50
(b) Intention to cease prac- tice ... ..	—	2	2	—	—	4
(c) Change of address ...	—	—	—	—	—	—
(d) Change of name ...	—	—	—	—	—	—
(e) Sending for medical help	—	69	—	—	—	69
(f) Stillbirths occurring in practice ... ..	1	3	—	—	—	4
(g) Deaths occurring in practice—						
(i) Mothers ...	—	—	—	—	—	—
(ii) Infants ... ..	2	2	—	—	—	4
(h) Laying out the dead ...	—	5	—	—	—	5
(i) Liability to be a source of infection ... ..	2	1	—	—	—	3
(j) Substitution of artificial feeding ... ..	9	23	12	—	—	44



**Supervisor of Midwives.**

Routine inspection visits	...	...	...	...	...	—
„ „ „ (Midwife out)	...	...	...	...	...	—
Special enquiry visits in respect of notifications :						
(a) Medical help	...	...	...	...	...	40
(b) Stillbirths	...	...	...	...	...	5
(c) Deaths occurring in practice	...	...	...	...	...	—
(d) Ophthalmia Neonatorum	...	...	...	...	...	1
(e) Laying out the dead	...	...	...	...	...	—
(f) To supervise disinfection	...	...	...	...	...	1
Other visits :						
Puerperal Pyrexia	...	...	...	...	...	9
Maternal deaths	...	...	...	...	...	—
Home helps	...	...	...	...	...	89
Nursing mothers	...	...	...	...	...	110
Labour visits	...	...	...	...	...	—
Nursing Homes	...	...	...	...	...	37
Administration of Gas and Air Analgesia	...	...	...	...	...	—
Ante-Natal and Post-Natal	...	...	...	...	...	68
Administration	...	...	...	...	...	917
Total						1,277
Ante-Natal Clinics attended						165

**DISTRICT MIDWIFERY SERVICE.**

(Divisional Committee)

Number of Confinements.

			<i>Acting as Midwife</i>	<i>Acting as Maternity Nurse</i>	<i>Total</i>
1945	...	...	249	159	408
1946	...	...	248	147	395
1947	...	...	338	230	568
1948	...	...	207	194	401

Administration of Gas and Air Analgesia by :

(a) Midwives	...	...	36			
(b) Maternity nurses	...	...	8	Total	...	44

Number of maternal deaths	...	...	...	...	...	—
Number of infantile deaths	...	...	...	...	...	4
Number of visits paid by midwives	...	...	...	...	...	13,298
Total attendances of patients at midwives' clinics	...	...	...	...	...	1,706

Attendances of patients at consultant clinics :

(a) Ante-natal	...	...	415			
(b) Post-natal	...	...	71	Total	...	486

### Medical Aid.

During the year medical aid was sought in 69 of the midwives' cases.

TABLE 17.

### NURSING HOMES REGISTRATION, Public Health Act, 1936.

(Divisional Committee—5th July to 31st December, 1948)

Name of Nursing Home	Date of Registration with Luton Borough Council	DIVISION OF BEDS			
		Maternity	Surgical	Medical	Total
Westdale ... ..	1.7.36	5	—	—	5
The Mount ... ..	5.6.45	—	—	12	12
The Chase ... ..	3.4.46	10	—	—	10
Totals ... ..		15	—	12	27

During the year 51 women were delivered in the Westdale Nursing Home, 144 in the Chase Nursing Home, and 109 in the Mount Nursing Home, which for part of the year was registered as a maternity nursing home.

### BOROUGH MATERNITY HOSPITAL.

#### Clinical and Administrative Statistics.

(North-West Regional Hospital Board—from 5th July)

	<i>Borough Maternity Hospital.</i>	<i>Extension.</i>	<i>Total.</i>
No. of patients in hospital—1.1.48 ...	11	28	39
No. of patients admitted during the year	764	679	1,443
No. of patients discharged during the year	752	673	1,425
No. of patients in hospital—31.12.48 ...	22	23	45
No. of patients died during the year ...	1	1	2
Admissions :			
No. of patients admitted for confinement—			
Borough ... ..	533	577	1,110
Other ... ..	124	11	135
No. of patients admitted for ante-natal or post-natal treatment—			
Borough ... ..	75	87	162
Others ... ..	32	4	36
	764	679	1,443

	<i>Borough Maternity Hospital.</i>	<i>Extension.</i>	<i>Total.</i>
No. of patient days* :			
(a) Ante-natal or post-natal treatment	1,243	537	1,780
(b) Confinements ... ..	9,084	7,994	17,078
(c) Total ... ..	10,327	8,531	18,858
Average duration of stay of women delivered in hospital ... ..	14.03 days	13.56 days	
Daily average for the year ... ..	21	20	
Maximum number of patients on any one day ... ..	30	30	60
Number of patients delivered by :			
(a) Midwives ... ..	541	532	1,073
(b) Doctors ... ..	105	58	163
Operations performed :			
Forceps delivery ... ..	45	24	69
Caesarean Section ... ..	19	—	19
Caesarean Section and sterilisation ...	1	—	1
Hysterotomy and sterilisation... ..	—	—	—
Ruptured membranes for induction of labour ... ..	12	11	23
Manual removal of placenta ... ..	11	8	19
Perineal suture ... ..	87	115	202
Episiotomy ... ..	36	43	79
Other operations ... ..	11	3	14
Forceps rate ... ..	6.8%	4%	
No. of deliveries ... ..	658	596	1,254
No. of viable children born ... ..	632	582	1,214
No. of stillbirths ... ..	26	15	41
No. of infantile deaths ... ..	8	7	15
Miscarriages ... ..	10	6	16
Causes of infantile death :			
Birth injury with shock or asphyxia ...	1	—	1
Congenital heart disease, Spina Bifida, Anencephalus, etc. ... ..	—	2	2
Hydrocephalus ... ..	—	—	—
Cleft palate : debility ... ..	—	—	—
White asphyxia ... ..	—	—	—

\* Includes patient-days at Chaul End Nursery Building.



					<i>Borough Maternity Hospital.</i>	<i>Extension.</i>	<i>Total.</i>
Enteritis	...	...	...	...	—	—	—
Icterus Neonatorum	...	...	...	...	—	—	—
Broncho-pneumonia	...	...	...	...	—	—	—
Prematurity	...	...	...	...	7	5	12
Erythroblastosis	...	...	...	...	—	—	—
Feeding :							
No. of infants wholly breast fed on leaving institution	...	...	...	...	475	450	925
No. of infants who at any time received a supplementary or complementary feed	...	...	...	...	141	122	263

TABLE 18. LEGITIMATE LIVE BIRTHS OCCURRING IN THE  
COUNCIL'S MATERNITY INSTITUTIONS DURING 1948  
(excluding multiple births).

The number of previous pregnancies (irrespective of outcome) being :

Age of Mother at Maternity	Pregnancy Order (including present pregnancy)									Total
	1	2	3	4	5	6	7	8	9+	
Years										
15-20	55	14	—	—	—	—	—	—	—	69
20-25	235	90	20	5	1	—	—	—	—	351
25-30	127	135	70	26	5	2	1	—	—	366
30-35	46	66	32	29	8	2	4	1	1	189
35-40	21	28	28	11	7	2	2	3	5	107
40-45	4	8	5	6	5	2	1	2	5	38
45+	1	—	1	1	—	—	1	—	—	4
All ages	489	341	156	78	26	8	9	6	11	1,124

Multiple births...18 (in three cases 1 of a twin pair stillborn).

Stillbirths...41 (in two cases also illegitimate)      Illegitimate...57 (in one case also stillborn).

### Training School : Midwifery—Part II.

No. of pupil midwives who passed the examination of the  
Central Midwives Board during the year ... .. 19

					<i>Patient days Chaul End Unit</i>		
					<i>Hospital Patients</i>	<i>Extension Patients</i>	<i>Total</i>
(a) Ante-natal and Post-natal treatment					—	—	—
(b) Puerperium	...	...	...	...	2,486	997	3,483
Total	...	...	...	...	2,486	997	3,483

**SPITTLESEA ISOLATION HOSPITAL**  
(North-West Regional Hospital Board—from 5th July)

TABLE 19

**SPITTLESEA HOSPITAL ADMISSIONS**

(According to diagnosis at admission)

	Scarlet Fever	Diphtheria	Cerebro- spinal Fever	Puerperal Pyrexia	Polio- myelitis and Ence- phalitis	Other*	No. of Patient days
January ...	7	1	2	1	1	8	299
February ...	7	1	—	1	2	7	360
March ...	12	1	2	1	2	10	464
April ...	5	1	—	3	1	15	415
May ...	8	3	1	—	2	8	552
June ...	8	—	—	1	—	16	423
July ...	7	—	—	—	—	24	718
August ...	3	1	—	—	—	30	787
September	5	1	—	—	—	14	522
October ...	4	—	—	—	—	22	663
November	3	—	—	—	2	22	631
December	1	—	—	—	1	10	435
Total ...	70	9	5	6	11	186	6269

\* Other cases total for year include : Measles 43, Meningitis 7, Whooping Cough 32.

**SPITTLESEA ISOLATION HOSPITAL**

Available bed days ...	...	...	...	...	...	22,145
Actual bed days of patients...	...	...	...	...	...	6,269
Percentage of bed occupation	...	...	...	...	...	16.04%
Maximum number of patients on any one day	...	...	...	...	...	33
Minimum number of patients on any one day	...	...	...	...	...	5
No. of patients in hospital 31.12.47	...	...	...	...	...	9
No. of patients admitted during the year	...	...	...	...	...	288
						297
No. of patients discharged well	...	...	...	...	...	270
No. of patients who died	...	...	...	...	...	10
No. of patients remaining in hospital 31.12.48	...	...	...	...	...	17
						297

**NURSERIES.**

(Divisional Committee—5th July to 31st December, 1948)

	<i>Manor Road</i>	<i>Alder Crescent</i>	<i>Stopsley</i>	<i>Total</i>
No. of Children on Register 1.1.48	82	70	34	186
No. of Children added to Register ...	110	89	31	230
No. of Children removed from Register ...	120	85	23	228
No. of Children remaining on Register 31.12.48	72	74	42	188
No. of Children on waiting list 31.12.48	25	—	8	33

# REPORT

## OF THE

# Chief Sanitary Inspector

Public Health Department,  
Town Hall,  
LUTON.

*1st January, 1949.*

His Worship the Mayor, Aldermen and  
Councillors of the Borough of Luton.

Ladies and Gentlemen,

Looking at the work of the Sanitary Department as a whole, though many remedies were secured, a feature of 1948 was the large amount of effort which failed to achieve satisfying results.

Repairs to the older and poorer types of dwellings, which would have been dealt with as individual unfit houses or in clearance areas but for the war, cause the greatest concern. Low rents are paid by the tenants of this class of property, and because of the greatly increased cost of housing repairs, the problem arises again and again of what repairs are reasonable, rather than what are necessary in the circumstances. Much of the work is no more than patching. The tenants have little inducement to take a real interest in their homes, a situation which is uneconomical in more than one respect.

Food inspection and related matters have not been overlooked. Three hundred and ninety-two samples of milk were taken for examination. Slaughterhouse inspections covered a hundred per cent. of the meat supplied through these channels.

Conferences and press reports have stressed the need for improving the conditions in all places where food is prepared, and particularly cafes and restaurants have been the subject of criticism. In Luton, frequent inspections of food premises have been carried out during the year; a great many structural improvements have been undertaken; and a good deal of advice has been given about food hygiene. The Food Committee has played its part in preventing the development of new establishments in unsatisfactory premises.

The popularity of ice-cream is reflected by the number of new applications to manufacture or sell this product. Fifty-three applications were granted; a number were withdrawn by applicants who could not comply with the required conditions; and three applicants appeared before the Public Health Committee to state a case. The installations of new equipment and instructions in the observance of strict cleanliness have



brought about great improvements in most of the registered premises where ice-cream is manufactured. The handling of loose ice-cream by street traders is, however, still far from satisfactory, and there is little prospect of material improvement without new legislation.

The Department took a new step by accepting seven students during the year under a Government sponsored scheme for practical training in the duties of a Sanitary Inspector. Five students qualified as Sanitary Inspectors.

Mr. S. J. Mayo and Mr. D. A. Warren returned to the Department in May after service with H.M. Forces and a fifteen months' course of training in Manchester. They were both successful in passing the qualifying examination and were appointed as Sanitary Inspectors in Luton.

In conclusion, I wish to thank members of the staff and other officers of the Council for the ready assistance they have given throughout the year.

I have the honour to be,

Your obedient servant,

ARTHUR J. NICHOLS,  
*Chief Sanitary Inspector.*

## SANITARY CIRCUMSTANCES OF THE AREA

### GENERAL.

Luton, which has an area of 8,736 acres, is situated in a valley between the Chiltern Hills at 200 to 400 feet above sea level in the town, rising to 400 to 600 feet above sea level on the surrounding hills. It is mainly built upon the upper chalk, with loam and clay deposits.

*Meteorology.*—The Luton Meteorological Station, which is under the control of the Borough Engineer, is situated in Wardown Park, New Bedford Road, from which the following observations were taken :—

*Sunshine.*—1,537.5 hours of sunshine were recorded during the year, the sunniest day being the 18th May, 1948, when 14.5 hours were recorded.

*Rainfall.*—The total rainfall recorded during the year was 26.67 inches, the wettest day being the 10th June, 1948, when 1.43 inches of rain were recorded.

*Temperatures.*—The maximum temperature during the year was 90° F., recorded on the 28th, 29th and 30th June, 1948, and the minimum temperature was 20° F., on the 21st and 22nd February, 1948, the mean temperature being 50.14° F.

*Wind.*—The prevailing wind during the year was south-west.

### WATER SUPPLY.

Luton has an abundant supply of excellent water which is distributed throughout the Borough by the Luton Water Company, and is derived from deep wells in the chalk situated in Crescent Road and Runley Wood. Chlorination of the supply is carried out, the average amount of chlorine pumped into the supply being 0.2 parts per million.

From information received from the Luton Water Company, the total amount of water supplied during the year ended 31st December, 1948, was 1,682,000,000 gallons. Assuming a population of 110,000 the total number of gallons used per head per day was approximately 41, an average of 16 gallons per head per day for industrial purposes, and 25 gallons per head per day for domestic use.

The following information, concerning the plumbo-solvency of the water, is supplied by the Luton Water Company :—

“ We are informed by the Water Pollution Research Laboratory that the water supplied from our chalk wells at Crescent Road is slightly plumbo-solvent. Tests were carried out on a length of unused lead pipe and it was found that although the percentage of lead dissolved in the water was relatively small this quantity was not reduced over a period of 14 days by any insoluble coating being formed on the inside of the pipe. In these circumstances although the quantity of lead dissolved in the water is small we are advised by the Water Pollution Research Laboratory not to use lead pipe for drinking water services. Plumbo-solvency is not usually associated with waters as hard as that supplied by this Company, but we understand that the percentage of carbon dioxide in the water is rather higher than normal which accounts for this exceptional case.

In the past no lead service pipes have been fitted in the Borough, at any rate during the present century, and instructions to plumbers carrying out work in the area of supply have always insisted on the use of steam quality galvanised tube for all water services. However, short lengths of lead pipe connecting the galvanised pipe to wash basins or to water closet cisterns have been permitted, and it is considered that the use of such short lengths is not a source of danger. This practice is still continued although the Company prefers the use of copper throughout the whole of the plumbing installations and the total avoidance of lead wherever possible."

Extensions of mains have been carried out in the following districts and roads during the year 1948 :—

Farley Hill Estate	
Ashcroft Road Estate	Icknield Way
Stonygate Road	Barbers Lane
(Chaul End School)	Belper Road
Vauxhall Motors Sports Ground	Riddy Lane
St. Thomas's Road	Strangers Way

There are now only three houses in the Borough which obtain their water supply from wells. Wells have been replaced in three instances by mains supply during 1948.

The following is a summary of the samples of water taken during the year from all sources.

Number of samples of water examined by the Public Analyst	...	4
Number of samples of water examined by the Medical Research Council for free chlorine and Bacillus Coli	... ..	205
Total	... ..	209

Number of samples of water obtained from :—

Crescent Road Pumping Station	... ..	102
Runley Wood Pumping Station	... ..	101
Shallow and Deep Wells, etc.	... ..	2
Other sources	... ..	4
	—	209

Number of samples found upon examination to be satisfactory	... ..	209
---	--------	-----

Number of samples found upon examination to be unsatisfactory...	... ..	0
	—	209

The following is a copy of the Analyst's latest report on the mains supply (taken November 22nd, 1948) :

No. 1/31 Crescent Road, unchlorinated.

No. 2/31 Runley Wood, chlorinated.



## Chemical Analysis

						<i>Parts per 100,000</i>	
						1/31	2/31
Free Ammonia	...	...	...	...	...	0.0008	0.0006
Albuminoid Ammonia	...	...	...	...	...	0.0002	0.0004
Oxygen absorbed in 4 hours at 80° F.	...	...	...	...	...	0.070	0.076
Nitrites	...	...	...	...	...	nil	nil
Nitrogen as Nitrates	...	...	...	...	...	0.741	0.494
Chlorine	...	...	...	...	...	2.7	1.7
Hardness, Total	...	...	...	...	...	32.0	31.0
Hardness, Permanent	...	...	...	...	...	7.5	6.0
Total Solids	...	...	...	...	...	45.0	44.0
pH Value	...	...	...	...	...	7.1	7.1
Free Chlorine (parts per million)	...	...	...	...	...	nil	0.1

Both samples were clear and free from smell.

A microscopic examination revealed the presence of some mineral and vegetable fragments.

## Bacteriological Examination

Number of organisms per c.c. growing on gelatine at room temperature in 3 days (20° C.)						8	nil
Liquefying organisms						2	nil
Number of organisms per c.c. growing on agar at blood-heat in 48 hours (37° C.)						2	1
Bacillus coli						Absent from 100 c.c.	Absent from 100 c.c.

## Opinion

Both these samples are in good condition and are quite suitable for use for all dietetic purposes.

## SEWERAGE AND SEWAGE DISPOSAL.

The drainage of the Borough is on the separate system, except in the old part of the Borough which is semi-separate.

The soil water sewage is dealt with at the New Mill End Sewage Purification Works by sedimentation, burning and filtration, the effluent being discharged into the River Lea at New Mill End.

## CLOSET ACCOMMODATION.

The following table shows the number of pail closets, earth closets and cesspools in the Borough at the end of December, 1948 :—

Pail closets	...	...	...	...	32
Earth closets	...	...	...	...	0
Cesspools	...	...	...	...	165

All pail closets are emptied either once or twice weekly between the hours of 10 p.m. and 6 a.m.

Cesspools are emptied by means of mechanical plant as and when required. 522 emptyings were arranged during the twelve months ended 31st December, 1948.

## PUBLIC CLEANSING—REFUSE DISPOSAL.

The following information is supplied by the Director of Public Cleansing.

The system of refuse disposal is wholly controlled tipping. The weight of house and trade refuse disposed of during the year was 32,146 tons, 4 cwt., 3 qrs.

In spite of continuing shortages of labour and of the right kind of labour, the frequency of refuse collection was maintained at seven days in respect of the premises in more than half of the Borough.

## SANITARY INSPECTION OF THE AREA.

## NUMBER AND NATURE OF INSPECTIONS MADE.

Complaints reported to Public Health Department	...	...	1,352*
Primary Inspection :—			
Where nuisances were found	...	...	1,692*
Where complaint was received and no nuisance found	...	...	192
Under Housing Acts	...	...	104
Under Rent Restrictions Acts	...	...	4
Where Infectious Disease has occurred	...	...	235
Bakehouses	...	...	156
Caravans, Tents, etc.	...	...	20
Cowsheds	...	...	23
Dairies and Milkshops	...	...	276
Factories	...	...	497
Fish Frying Premises	...	...	42
Fish Curing Premises	...	...	7
Food Preparing Premises	...	...	265
Food Preparing Premises (Ice Cream)	...	...	324
Food Storage Premises	...	...	174
Markets and Shops	...	...	230
Marine Stores	...	...	3
Offensive Trades	...	...	5
Offices	...	...	2
Outworkers' Premises	...	...	637
Overcrowding	...	...	81
Restaurant Kitchens	...	...	222
Shops Act (Section 10)	...	...	4
Slaughterhouses (for meat inspection)	...	...	1,926
Schools	...	...	13
Stables and Piggeries	...	...	22
Theatres and Amusement Halls	...	...	10
Urinals—Public and Private	...	...	15

\* These figures do not include 446 complaints and 1,362 primary visits in connection with Rats and Mice, which are dealt with elsewhere in the Report.

## OTHER VISITS OR INSPECTIONS.

Drainage. Number of drains tested or exposed	...	...	84
Food Inspection (excluding Slaughterhouses)	...	...	241
Interviews	...	...	1,108
Investigations of Infestations of Insect pests (excluding bugs)	...	...	76
Investigations of Bug Infestations	...	...	122
Inspection of Fuel Appliances	...	...	30
Smoke Observations	...	...	369
Visits to obtain Water Samples for Analysis	...	...	209
„ under the Food and Drugs Act, for Samples, etc.	...	...	629
„ to property under notice or work in progress	...	...	6,081
Miscellaneous visits	...	...	701
			<hr/> 18,183 <hr/>

## ABATEMENT OF NUISANCES.

Drainage reconstructed	...	...	49
„ repaired, trapped, etc.	...	...	61
„ unstopped	...	...	158
Chambers constructed	...	...	10
Repairs to chambers or new covers	...	...	32
Cesspools emptied because of overflow	...	...	23
„ replaced by water carriage system	...	...	1
Soil or vent pipes—new fixed	...	...	5
„ „ repaired	...	...	23
Water closets—repaired or supplied with water	...	...	286
„ „ new pans or pedestals fixed	...	...	177
„ „ additional constructed	...	...	7
Waste Pipes—repaired or trapped	...	...	69
„ „ or R.W.P.'s disconnected from drains	...	...	4
„ „ R.W.P.'s and eaves gutters repaired	...	...	228
Sinks provided or replaced	...	...	20
Accumulations of refuse removed	...	...	20
Animals, fowls, etc.	...	...	12
Brickwork or pointings repaired	...	...	232
Coppers repaired or renewed	...	...	25
Dampness remedied	...	...	120
Damp Proof courses inserted	...	...	1
Dustbins supplied	...	...	130
Fireplaces, stoves and flues repaired	...	...	143
Flooring and other woodwork repaired or renewed	...	...	347
Floors—concrete or quarried repaired or renewed	...	...	31
Gas fittings or services repaired	...	...	12
Gullies in street unstopped	...	...	4
Ventilated food cupboards provided	...	...	2
Overcrowding abated	...	...	23
Plaster repaired	...	...	610
Rats and mice infestations abated	...	...	1,351
Rent Books made to comply with Regulations of Housing Act...	...	...	16
Roofs made watertight	...	...	398
Stagnant water removed	...	...	1



Walls and ceilings cleansed ... ..	80
Water supplies reinstated or made sufficient ... ..	27
Water supplied to houses previously supplied by wells ... ..	3
Windows—Cords, fasteners and glass repaired or renewed ...	327
Premises treated against insect pests ... ..	19
Verminous rooms fumigated ... ..	270
Ventilation improved ... ..	20
Ventilation—sub-floor provided ... ..	4
Yards and passages paved ... ..	46
Miscellaneous ... ..	112
Total ... ..	5,539

### STATUTORY NOTICES.

#### NUMBER OF LEGAL NOTICES ISSUED FOR ABATEMENT OF NUISANCES.

	<i>Served</i>	<i>Complied with</i>
Number of Outstanding Notices, 31st Dec., 1947 ...	97	97
Public Health Act, 1936. Section 39 ... ..	26	16
Public Health Act, 1936. Section 45 ... ..	20	18
Public Health Act, 1936. Section 56 ... ..	3	1
Public Health Act, 1936. Section 93 ... ..	61	46
Luton Corporation Act, 1911. Section 36 ... ..	17	16
	<hr/> 224	<hr/> 194

### INFECTIOUS DISEASES.

Premises inspected where notifiable diseases have occurred ...	235
Cases removed to Isolation Hospital ... ..	80
Rooms disinfected after infectious, contagious or other disease, etc.	182
Premises where repairs or redecorations have been carried out after infectious diseases ... ..	19
Rooms where walls and ceilings were rubbed down after infectious disease ... ..	306
Visits paid to ascertain if notices to repair or redecorate have been complied with ... ..	51
Rooms disinfected by occupiers ... ..	124
Premises visited tracing infectious diseases ... ..	173
Articles disinfected by steam at request of owners ... ..	1,264
Articles disinfected by fumigants at request of owners ... ..	933
Articles destroyed by burning at request of owners ... ..	51
Total visits paid to infected premises ... ..	408

## DISINFECTANT.

During the year 40 gallons of disinfecting fluid were supplied to the public, free of charge, for use in premises where cases of infectious disease, etc., had occurred.

## LIBRARY BOOKS.

During the year 749 library books were withdrawn from circulation and were disinfected before they were returned.

## PUBLIC SWIMMING BATHS.

There are two Public Swimming Baths in the Borough, both owned by the Corporation.

The Public Baths are situate in Waller Street, Luton, and consist of a covered Swimming Pool, 46 Slipper Baths and 1 Vapour Bath, whilst the Open Air Swimming Pool, situate off New Bedford Road, Luton, caters for Swimming and Bathing only.

During the season of 1948 the following number of bathers was dealt with :—

						<i>Waller Street Baths</i>	<i>Open Air Swimming Pool</i>
Civilians	...	...	...	...	...	142,801	58,458
Members of H.M. Forces	...	...	...	...	...	2,419	Nil
Total	...	...	...	...	...	<u>145,220</u>	<u>58,458</u>

Chloroscope examinations of the water are carried out by the Attendants approximately three times per day, and in addition, samples of water are sent to the Public Analyst for examination every two months.

## THEATRES.

Inspection of Sanitary Accommodation in the Cinemas and the Theatre has been made during the year.

Minor Sanitary defects were found and attended to.

## ERADICATION OF BED BUGS.

During the year ended 31st December, 1948, 61 complaints of verminous premises were received, and in all instances where bugs were found, disinfestation was carried out. The use of liquid vermicide containing DDT was relied upon for treating the infestations, and proved satisfactory. In a few instances re-infestations occurred.

TABLE 20.

The following table shows the number of premises and rooms dealt with during 1948 :—

	Number of Premises		Number of Rooms	
	Found to be infested	Disinfested	Found to be infested	Disinfested
Number of Council Houses ... ..	9	9	23	23
Number of other Houses ... ..	100	100	242	242
Number of cases where disinfestation has been carried out prior to removal from Clearance Areas, etc. into new Council Houses ... ..	—	—	—	—
Number of cases where disinfestation has been carried out by Corporation Disinfecting Officer ... ..	107	107	263	263
Number of cases where disinfestation has been carried out by Occupants or Contractors ... ..	2	2	2	2
Number of complaints of infestation received (61) ... ..	48	48	126	126
Number of cases found by Sanitary Inspectors ... ..	61	61	139	139

### RATS AND MICE DESTRUCTION.

During the year the sewers have received three treatments for rat disinfestation. Two initial treatments were completed in March when approximately 3,500 manholes were baited ; 1,639 takes were recorded for the first treatment, and 1,121 for the second. The maintenance treatment was completed in October when a considerable reduction of infestation was observed (703 takes). A certain amount of vertical block control was carried out during these campaigns.

So far as dwellinghouses and business premises were concerned no noticeable decrease in infestation was observed. The proximity of rural areas no doubt accounted for a large number of re-infestations.

The Corporation Refuse Tip again received special treatment, and at no time during the year has the infestation been out of hand.



TABLE 21.

The following table shows the amount of work carried out during 1948 :—

		Com- plaints received	Infesta- tions dealt with	Treatment com- pleted	Premises requiring re-treat- ment	Bodies found	Number of Rats destroyed according to Ministry formula
Private Dwellings	Rats	263	1,127	1,127	—	489	442
	Mice	71	84	84	—	472	—
Business Premises	Rats	55	85	74	11	496	14,861
	Mice	57	66	66	—	901	—
Totals	Rats	318	1,212	1,201	11	985	15,303
	Mice	128	150	150	—	1,373	—

THE FACTORIES ACT, 1937  
INSPECTION OF FACTORIES

FACTORIES, FACTORIES (NO MECHANICAL POWER), AND  
WORKPLACES

Premises inspected	...	...	...	...	...	...	...	2181
Premises inspected and found satisfactory	...	...	...	...	...	...	...	1942
Premises inspected and found unsatisfactory	...	...	...	...	...	...	...	239
Factories where defects were found and referred by H.M. Inspector	...	...	...	...	...	...	...	7
Reports on action taken sent to H.M. Inspector	...	...	...	...	...	...	...	7
Number of defects remedied as a result of H.M. Inspector's notifications	...	...	...	...	...	...	...	24

LIST OF DEFECTS FOUND IN FACTORIES, FACTORIES (NO  
MECHANICAL POWER), AND WORKPLACES

Abstract not posted	...	...	...	...	...	...	...	4
Cleanliness, want of	...	...	...	...	...	...	...	59
Dilapidations, General	...	...	...	...	...	...	...	17
Drains choked or defective	...	...	...	...	...	...	...	5
Dustbins, defective or insufficient	...	...	...	...	...	...	...	7
Floors defective	...	...	...	...	...	...	...	4
Lighting insufficient	...	...	...	...	...	...	...	1
Overcrowding	...	...	...	...	...	...	...	1
Rat or Mice infestation	...	...	...	...	...	...	...	151
Roofs defective	...	...	...	...	...	...	...	6
Thermometers, absence of	...	...	...	...	...	...	...	5
Trade Refuse, burning of	...	...	...	...	...	...	...	1
Ventilation, want of	...	...	...	...	...	...	...	6
Water Closet, unsuitable or defective	...	...	...	...	...	...	...	18
Water Closet, not separate for sexes	...	...	...	...	...	...	...	3
„ „ no ventilated Lobby	...	...	...	...	...	...	...	26
„ „ not ventilated	...	...	...	...	...	...	...	17
„ „ not lighted	...	...	...	...	...	...	...	14
„ „ dirty condition	...	...	...	...	...	...	...	109
„ „ needing repair	...	...	...	...	...	...	...	88
„ „ not screened	...	...	...	...	...	...	...	73
„ „ without indication	...	...	...	...	...	...	...	220
„ „ insufficient	...	...	...	...	...	...	...	4
Washing facilities absent or inadequate	...	...	...	...	...	...	...	12
Water supply insufficient	...	...	...	...	...	...	...	1

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701

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The Local Authority again considered the using of basement bake-houses, and because the time is inopportune to close these premises, the position will again be reviewed in 1949.

# REGISTERED FACTORIES AND FACTORIES (NO MECHANICAL POWER)

## FACTORIES ACT, 1937

The following is a classified list of the Factories and Factories (No Mechanical Power) on the Register at the 31st December, 1948.

### FACTORIES

Artificial Flowers	...	...	...	...	...	...	...	1
Beer Bottling, Coffee Roasting and Grinding	...	...	...	...	...	...	...	1
Blacksmiths	...	...	...	...	...	...	...	4
Bleachers, Dyers and Felt Body Makers	...	...	...	...	...	...	...	14
Boilers Manufacturer	...	...	...	...	...	...	...	1
Boot Repairers	...	...	...	...	...	...	...	28
Brass and Aluminium Founders	...	...	...	...	...	...	...	4
Breeze Block Manufacturers	...	...	...	...	...	...	...	2
Brush Manufacturer	...	...	...	...	...	...	...	1
Builders	...	...	...	...	...	...	...	4
Cardboard Box Makers	...	...	...	...	...	...	...	15
Cellulose Spraying	...	...	...	...	...	...	...	3
Chemical Makers	...	...	...	...	...	...	...	4
Chocolate, Cocoa and Sweet Manufacturers	...	...	...	...	...	...	...	2
Cigarette Manufacturer	...	...	...	...	...	...	...	1
Coach and Motor Body Builders	...	...	...	...	...	...	...	3
Corn Merchants	...	...	...	...	...	...	...	2
Dairies	...	...	...	...	...	...	...	4
Dry Cleaning and Dyeing	...	...	...	...	...	...	...	1
Electric Appliances	...	...	...	...	...	...	...	2
Electrical Engineers	...	...	...	...	...	...	...	11
Electro-Platers	...	...	...	...	...	...	...	2
Feather Dyeing and Mounting	...	...	...	...	...	...	...	5
Feather Sorting and Grading	...	...	...	...	...	...	...	1
Felt Products	...	...	...	...	...	...	...	1
Fireplace Manufacturer	...	...	...	...	...	...	...	1
French Polishers (Cabinets)	...	...	...	...	...	...	...	1
Furriers	...	...	...	...	...	...	...	2
Garment Makers and Menders and Corset Makers	...	...	...	...	...	...	...	10
General Engineers	...	...	...	...	...	...	...	39
Glass Workers	...	...	...	...	...	...	...	5
Grass Mat Makers	...	...	...	...	...	...	...	1
Hat Blockers and Blockmakers	...	...	...	...	...	...	...	17
Hat Lining Manufacturers	...	...	...	...	...	...	...	11
Hat Manufacturers	...	...	...	...	...	...	...	238
Hat Materials Merchants	...	...	...	...	...	...	...	1
Ice-Cream Manufacturers	...	...	...	...	...	...	...	1
Iron Founders	...	...	...	...	...	...	...	9
Jigs and Tools Makers	...	...	...	...	...	...	...	2
Joiners, Woodworkers and Carpenters	...	...	...	...	...	...	...	35
Knitted Hood Makers and Proofers	...	...	...	...	...	...	...	3
Laundries	...	...	...	...	...	...	...	5
Leather Goods	...	...	...	...	...	...	...	1
Machine Makers	...	...	...	...	...	...	...	2

Carried forward 501



							Brought forward	501
Millinery	...	...	...	...	...	...	...	2
Mineral Water Manufacturers and Brewers	...				...	...	...	6
Motor Vehicle Engineers, Repairs and Cycle Repairs							...	45
Pattern Makers		...	...	...	...	...	...	3
Photographic Printers and Developers				...	...	...	...	3
Plastics	...	...	...	...	...	...	...	2
Powder Puffs, Braces, etc., Manufacturer				...	...	...	...	1
Printers and Letterpress Printers			...	...	...	...	...	23
Sausage Makers, Pie Makers, etc.			...	...	...	...	...	11
Saw Mills	...	...	...	...	...	...	...	3
Sewing Machine Engineers			...	...	...	...	...	2
Sheet Metal Workers	...		...	...	...	...	...	8
Soap Powders Manufacturers			...	...	...	...	...	2
Stone Masons	...	...	...	...	...	...	...	3
Tailors and Clothiers	...		...	...	...	...	...	32
Tinsmiths	...	...	...	...	...	...	...	1
Toilet Requisites		...	...	...	...	...	...	2
Trailer Caravans		...	...	...	...	...	...	1
Typewriter Repairs		...	...	...	...	...	...	2
Undertakers	...	...	...	...	...	...	...	2
Upholsterers	...	...	...	...	...	...	...	4
Welders	...	...	...	...	...	...	...	1
Miscellaneous	...	...	...	...	...	...	...	36
								<hr/> 696

### FACTORIES (NO MECHANICAL POWER)

Blacksmiths and Wheelwrights	...	...	...	...	...	5
Boot Repairers	...	...	...	...	...	1
Builders' Yards and Brickmakers	...	...	...	...	...	3
Coach Builders and Repairers, Motor Vehicle and Cycle Repairers						6
Dress and Coat Makers' Alterations	...	...	...	...	...	4
Electrical Engineers	...	...	...	...	...	2
Feather Work	...	...	...	...	...	2
French Polishers	...	...	...	...	...	1
General Engineers	...	...	...	...	...	2
Hat and Millinery Manufacturers	...	...	...	...	...	11
Joiners	...	...	...	...	...	4
Knitted Goods	...	...	...	...	...	1
Photographers	...	...	...	...	...	1
Radio Repairs	...	...	...	...	...	1
Sheet Metal Workers	...	...	...	...	...	1
Sweet Manufacturers	...	...	...	...	...	2
Tailors	...	...	...	...	...	6
Upholsterers	...	...	...	...	...	3
Washing Powders Manufacturers	...	...	...	...	...	1
Watch, Clock, Jewellery and Typewriter Repairs	...	...	...	...	...	2
Weighing Machine Repairers and Scale Makers	...	...	...	...	...	2
Miscellaneous	...	...	...	...	...	10
						<hr/> 71

TABLE 22. OUTWORKERS RETURNS.

OUTWORKERS LISTS																											
Section 110, Factories Act, 1937																											
Section 107, Factory and Workshop Act, 1901																											
Nature of Work	Lists received from Employers and other Authorities						Notices served on occupiers as to keeping or sending lists			Prosecutions		Outwork in unwholesome premises, Sec. 111.			Outwork in infected premises, Sec. 153. P.H.A. 1936.			Lists forwarded to other Authorities			Lists received from other Authorities						
	Sending once in the year		Sending twice in the year		Lists	Con- tractors	Work- men	Lists	Con- tractors	Work- men	Failing to keep and permit inspection of lists	Failing to send lists	Instances	Notices served	Prosecutions	Instances	Orders made Sec. 153 P.H.A. 1936	Prosecutions Sec. 153 P.H.A. 1936	Local Authorities to whom lists of outworkers have been forwarded	Number of lists	Workmen	Contractors	Authorities from whom lists have been received	Numbers of lists	Workmen	Contractors	
	Outworkers		Outworkers																								
	Making, etc., Wearing Apparel	99	3	530	87	3	943														Dunstable B.C. Harpenden U.D.C.	27	38	-	Corporation of London	2	2
Brush Making ...	-	-	-	1	-	43														Potters Bar U.D.C.	2	21	-	Chelsea M.B. ...	2	11	-
Box Making ...	1	-	1	-	-	-														Where cases have arisen work has been withheld by verbal arrangement	7	35	-	Finsbury M.B. ...	2	3	-
Paper Bag Making	1	-	1	-	-	-														No separate arrangement	8	14	-	Kensington M.B. ...	2	4	-
Plastic Work ...	1	-	3	-	-	-														Luton R.D.C.	54	96	-	Stepney M.B. ...	2	3	-
Lampshade Making	-	-	-	1	-	4														Wing R.D.C.	3	3	-	St. Marylebone M.B. ...	2	16	-
																				Aylesbury B.C.	1	1	-	City of Westminster M.B.	2	3	-
																				Brighton C.B.	1	2	-	Dunstable B.C.	2	1	-
																				St.Albans R.D.C.	1	1	-	Hitchin U.D.C.	2	1	-
																				Southwick U.D.C.	1	1	-	Islington M.B. ...	1	1	-
Totals	102	3	535	89	3	990	-	-	-	-	-	-	-	-	-	-	-	-	-	126	244	-	20	46	3		

The homes of all outworkers are visited by the Sanitary Inspectors who deal with any nuisance or other irregularity

## HOUSING.

### I.—Inspection of Dwelling-houses during the year :—

(1) (a)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	...	2,110
(b)	Number of inspections made for the purpose	... ..	6,881
(2) (a)	Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Acts...	... ..	7
(b)	Number of inspections made for the purpose. Visits to properties already recorded in (2) (a)	... ..	104
(3)	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation		7
(4)	Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	... ..	1,535

### II.—Remedy of defects during the year without service of formal Notices :—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	... ..	1,599
---	--------	-------

### III.—Action under Statutory Powers during the year :—

#### A.—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :—

(1)	Number of dwelling-houses in respect of which notices were served requiring repairs	... ..	0
(2)	Number of dwelling-houses which were rendered fit after service of formal notices :—		
(a)	By Owners	... ..	0
(b)	By Local Authority in default of owners	...	0

#### B.—Proceedings under Public Health Acts :—

(1)	Number of dwelling-houses in respect of which formal notices were served requiring defects to be remedied...	127
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a)	By Owners	... .. 194
(b)	By Local Authority in default of owners	... 0



C.—Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—

(1) Number of dwelling-houses in respect of which Demolition Orders were made ... ..	4
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders ... ..	3

D.—Proceedings under Section 12 of the Housing Act, 1936 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ..	0
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ... ..	0

*Housing Act, 1936 :—*

(a) (i) Number of dwellings overcrowded at end of year ...	97
(ii) Number of families dwelling therein ... ..	165
(iii) Number of persons dwelling therein ... ..	889
(b) Number of new cases of overcrowding reported during the year ... ..	21
(c) (i) Number of cases of overcrowding relieved during the year. (48 families in 23 houses) ... ..	23
(ii) Number of persons concerned in such cases ... ..	234
(d) Cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding ... ..	1
(e) (i) Number of Council houses found to be overcrowded at end of year ... ..	10
(ii) Number of families dwelling therein ... ..	20
(iii) Number of persons dwelling therein ... ..	97
(f) Number of cases of overcrowding in Council houses relieved during the year ... ..	2

## INSPECTION AND SUPERVISION OF FOOD.

### FOOD AND DRUGS ACT, 1938. MILK.

Registered :—

Cowkeepers	...	...	...	...	...	...	...	4
Wholesalers	...	...	...	...	...	...	...	6

Registered Purveyors for Sale of :—

Tuberculin Tested Milk	...	...	...	...	...	...	8
Tuberculin Tested Milk (Certified)	...	...	...	...	...	...	1
Pasteurised Milk	...	...	...	...	...	...	8
Ungraded Loose Milk	...	...	...	...	...	...	28
Prepacked Milk only	...	...	...	...	...	...	150

### MILK (SPECIAL DESIGNATIONS) ORDER.

The following licences were granted during 1948 :—

#### **Tuberculin Tested Milk.**

Establishment at which milk is bottled	...	...	1
Establishment at which milk is sold in bottles as supplied by wholesaler	...	...	7
Supplementary	...	...	1
		—	9

#### **Tuberculin Tested Milk (Certified).**

Supplementary	...	...	...	...	...	1
					—	1

#### **Pasteurised Milk.**

Holder Process	...	...	...	...	...	2
H.T.S.T. Process	...	...	...	...	...	1
Dealers (including Tuberculin Tested (Pasteurised) )						7
Supplementary	...	...	...	...	...	1
					—	11
					—	21

Number of Milk Vendors resident in Borough	...	189
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### BACTERIOLOGICAL EXAMINATION OF MILK.

During the year 214 samples of milk were submitted for bacteriological examination and Table 23 shows the results of these examinations.

TABLE 23. BACTERIOLOGICAL EXAMINATION OF MILK.

	Total samples submitted	Coliform present out of 3 tubes			Per- centage satis- factory	Methylene Blue Test		Per- centage satis- factory	Phosphatase		Per- centage satis- factory
		1	2	3		Passed	Failed		Passed	Failed	
Ungraded Milk ...	14	1	3	6	28.57	9	5	64.29	—	—	—
Pasteurised ...	153	—	—	—	—	136	17	88.89	143*	9	93.45
Tuberculin Tested ...	9	2	0	1	66.66	8	1	88.89	—	—	—
Tuberculin Tested (Certified) ...	4	0	0	0	100	3	1	75	—	—	—
Tuberculin Tested (Pasteurised)	18	—	—	—	—	16	2	88.89	18	0	100
Sterilised ...	16	—	—	—	—	16	0	100	13	3	81.25

\* 1 Sample of Pasteurised Milk not submitted to Phosphatase Test



TABLE 24.

## SUMMARY OF CHEMICAL ANALYSES OF MILK SAMPLES.

Period	No. of Samples Examined	AVERAGES	
		Fat %	Solids not Fat %
January ... ..	10	3.61	8.50
February ... ..	19	3.55	8.64
March ... ..	23	3.47	8.58
Quarter ended 31.3.48 ...	52	3.52	8.58
April ... ..	13	3.23	8.66
May ... ..	12	3.15	8.84
June ... ..	9	3.32	8.63
Quarter ended 30.6.48 ...	34	3.23	8.72
July ... ..	9	3.79	8.68
August ... ..	10	3.46	8.67
September ... ..	10	3.86	8.95
Quarter ended 30.9.48 ...	29	3.70	8.77
October ... ..	10	3.71	8.74
November ... ..	13	3.84	8.77
December ... ..	10	3.82	9.14
Quarter ended 31.12.48 ...	33	3.79	8.87
Year ended 31.12.48 ...	148	3.55	8.71

## EXAMINATION OF MILK.

## SECTION 25, FOOD AND DRUGS ACT, 1938.

Thirty samples of milk were taken and tested by guinea-pig inoculation, and 28 samples were found to be free from tubercle bacilli. Results from two samples were not obtained because the guinea-pigs died of intercurrent infection. Further samples were taken.

In five samples there was serological evidence of *Brucella abortus*, and reports were sent to the County Medical Officers of Health concerned

## BACTERIOLOGICAL EXAMINATION OF WASHED MILK BOTTLES.

Twenty washed milk bottles were taken for examination.

Fifteen were found to be “satisfactory” (600 bacteria per pint bottle); four were “fairly satisfactory” (more than 600 bacteria but less than 2,000 bacteria per pint bottle); and one, with a count of 4,000 bacteria, was unsatisfactory.

In the case of the unsatisfactory bottle, the matter was taken up with the dairyman concerned and advice given.

## REGISTRATIONS OF PREMISES USED FOR THE MANUFACTURE, STORAGE OR SALE OF FOOD

		Premises on Register, 1947	Added to Register, 1948	Removed from Register, 1948	Totals
Sale and Storage of Ice-cream	...	74	41	14	101
Manufacture of Ice-cream	...	21	5	7	19
Manufacture of Preserved Foods	...	68	2	1	69
Fish Frying and Curing	...	27	1	—	28

## ICE-CREAM.

Seventy-six samples of ice cream were examined in the Medical Research Council's laboratory.

Judging the samples of ice cream on the time taken to decolourise Methylene Blue and applying the Public Health Laboratory Service grading, the results of the examinations are shown below :—

Public Health Laboratory Service Grading			
GRADE 1	GRADE 2	GRADE 3	GRADE 4
21	22	13	20

Those falling in categories 3 and 4 were samples considered unsatisfactory, and necessitated further investigation either at the place of manufacture or at the premises from which the ice cream was sold.

In thirteen samples of the ice cream, faecal coli was reported present and further investigation was made and instruction given on the observance of hygienic principles.

TABLE 25

## MEAT INSPECTION IN SLAUGHTERHOUSES.

	Cattle exclud- ing Cows	Cows	Calves	Sheep and Lambs	Pigs	Total
Number killed ... ..	3,599	1,610	2,924	7,010	261	15,404
Number Inspected ... ..	3,599	1,610	2,924	7,010	261	15,404
Percentage of number killed which were inspected	100%	100%	100%	100%	100%	100%
<b>All diseases except Tuberculosis :</b>						
Whole carcasses condemned	—	2	12	13	6	33
Carcasses of which some part or organ was condemned	1,158	701	16	507	25	2,407
Percentage of the number inspected affected with disease other than tuber- culosis ... ..	32.18%	43.66%	0.96%	7.42%	11.88%	15.84%
<b>Tuberculosis only :</b>						
Whole carcasses condemned	37	66	10	—	3	116
Carcasses of which some part or organ was condemned	694	658	2	—	16	1,370
Percentage of the number inspected affected with Tuberculosis ... ..	20.31%	44.97%	0.41%	—	7.28%	9.65%



## INSPECTION OF MEAT AND OTHER FOODS.

The amount of unsound food condemned and destroyed during the year comprised :—

<i>No. of Parcels</i>	<i>Article</i>							<i>Weight in lbs.</i>
2,414	Beef	...	...	...	...	...	...	171,535
59	Pork	...	...	...	...	...	...	2,752
183	Mutton	...	...	...	...	...	...	2,088
25	Meat, other than from Slaughterhouses	...	...	...	...	...	...	1,471
740	Bacon and Ham	...	...	...	...	...	...	328
	Boneless Turkey	...	...	...	...	...	...	17
	Vegetables—Fresh and Canned and Soups	...	...	...	...	...	...	2,161
	Fish—Fresh and Canned	...	...	...	...	...	...	6,403
	Fish Cakes	...	...	...	...	...	...	426
	Cheese	...	...	...	...	...	...	31
	Canned and Powdered Milk	...	...	...	...	...	...	1,392
	Canned and Cooked Meat	...	...	...	...	...	...	2,399
	Crumpets, Cakes, Cake Mixture, Buns, etc.	...	...	...	...	...	...	120
	Flour and Bread	...	...	...	...	...	...	1,708
	Preserves	...	...	...	...	...	...	405
	Tea	...	...	...	...	...	...	9
	Cocoa	...	...	...	...	...	...	1,120
	Coffee	...	...	...	...	...	...	2
	Pudding Mixture	...	...	...	...	...	...	8
	Fruit—Fresh and Canned	...	...	...	...	...	...	736
	Fruit—Dried	...	...	...	...	...	...	188
	Cereals	...	...	...	...	...	...	434
	Sweets and Chocolate	...	...	...	...	...	...	5
	Egg Powder	...	...	...	...	...	...	48
	Sugar	...	...	...	...	...	...	90
	Suet	...	...	...	...	...	...	6
	Meat Pies and Puddings	...	...	...	...	...	...	294
	Vinegar	...	...	...	...	...	...	58
	Pickles and Sauces	...	...	...	...	...	...	88
	Paste	...	...	...	...	...	...	18
	Semolina	...	...	...	...	...	...	5
	Fruit Puddings	...	...	...	...	...	...	30
	Sundries	...	...	...	...	...	...	49
87 tons 13 cwts. 3 qrs. 4 lbs.								
3,421								196,424

The above statement includes the weight of the entire carcasses and organs of 37 cattle, excluding cows, 68 cows, 22 calves, 13 sheep and lambs and 9 pigs.

## TUBERCULOSIS IN CALVES.

During the year Veterinary Inspectors of the Ministry of Agriculture and Fisheries were notified of five calves examined in the slaughterhouses and found to be affected with Tuberculosis.

From the reports on the dams traced by the Veterinary Inspectors it was learned that one dam was found to be affected with tuberculosis and dealt with.

## SLAUGHTER OF ANIMALS ACT, 1933.

Number of Slaughtermen on Register at 31st December, 1947	...	37
Applications for Licences considered during 1948	... ..	1
Number of Slaughtermen on Register at 31st December, 1948	...	38

## SALE OF FOOD AND DRUGS ACTS.

During the year 369 samples were taken, 166 being formal and 203 informal samples.

<i>Formal</i>	<i>Informal</i>	<i>Nature of Sample</i>
—	4	Butter
—	21	Beverages—tea, coffee, etc.
—	4	Cheese
—	12	Meat and meat products
—	19	Confectionery, sweets, etc.
—	17	Fish—canned, and fish and meat paste
—	11	Fruit—fresh and preserved
6	21	Groceries—miscellaneous
—	18	Jam, honey, marmalade, etc.
—	4	Lard and Cooking Fat
—	4	Margarine
—	6	Milk and Milk Foods (canned)
148	—	Milk
—	9	Ice cream
—	33	Patent medicines and chemical substances
—	5	Sausages and sausage meat
—	13	Temperance drinks & non-alcoholic wines
12	2	Wines, spirits and beers
<hr/> 166	<hr/> 203	
	369	

TABLE 26.

Of the samples analysed 20 were reported to be not genuine, details of which, and the action taken in regard thereto, are as follows :-

Sample No.	Formal	Article	Adulteration or other irregularity	Action taken
7927	1	Milk	12.1% added water	Third portion of sample in possession of Local Authority burst after sampling. Further samples proved genuine—no further action.
7928	1	„	10.8% added water	
7949	1	„	11.3% fat abstracted	Matter investigated at farm. Advice tendered on the handling of milk. Average fat content of total consignment of 35½ gallons equalled 2.88%.
7950	1	„	30% fat abstracted	
7951	1	„	3.3% fat abstracted	
7952	In-formal	Tapioca	Starchy matter other than tapioca starch—100%.	Sample purchased privately. Investigation disclosed that substance was not sold as tapioca.
7975	1	Milk	1.5% added water	Matter investigated at farm—no further action.
7976	1	„	9.3% fat abstracted	Matter investigated at farm. Producer advised to contact County Council Agricultural Adviser concerning nature of foodstuffs used.
7977	1	„	11% fat abstracted	
7978	1	„	0.8% added water	Matter investigated at farm. No further action.
7980	1	„	5.2% added water	Matter investigated at farm. Farmer now ceased milk production.
7994	1	„	6% fat abstracted	Average fat content of total consignment of 24 gallons equalled 3.175%. Producer warned.
8083	1	„	4% fat abstracted	Average fat content of total consignment of 60 gallons equalled 3.136%.
8088	1	„	6.6% fat abstracted	Matter investigated at farm. Milk found as from cow—advice tendered.
8004	1	„	9% fat abstracted	Matter investigated at farm. Milk found as from cow—advice tendered.
8104	1	„	15% fat abstracted	Average fat content of total consignment above standard. Producer warned.
8105	1	„	26% fat abstracted	
8107	1	„	9% fat abstracted	Matter investigated—milk found as from cow. Producer advised to contact County Council Agricultural Adviser.
8030	1	„	6% fat abstracted	Milk found as from cow—average fat content of total consignment of 58 gallons equalled 3.78%.
8253	1	„	13% fat abstracted	Milk found as from cow. Average fat content of total consignment of 41 gallons equalled 3.65%.



## APPENDIX I.

### PREMATURE INFANTS.

A premature infant is defined as one weighing less than  $5\frac{1}{2}$  lbs. at birth. The term includes, therefore, somewhat small, but healthy babies who require little more than ordinary care and management, and, on the other hand, infants who are so small that they have little chance of surviving nowever much care they are given.

Between these extremes are infants who, with expert attention, have a good chance of becoming healthy, vigorous babies, but who would probably not survive the ordinary rigours of early life which the normal baby meets without harm.

Special arrangements for the care of premature infants in their homes are made within the Council's municipal midwifery service, and infants who cannot be cared for at home are admitted to hospital.

Premature births which occurred during the year are analysed below according to place of birth, and birthweight.

### PREMATURE INFANTS CLASSIFIED ACCORDING TO BIRTH WEIGHT.

	Under 2 lbs.	2-3 lbs.	3-4 lbs.	4-5 lbs.	5- $5\frac{1}{2}$ lbs.	Weight not Re- corded	All
Number ... ..	3	3	17	41	59	—	123
No. surviving after 24 hours ... ..	2	3	14	40	58	—	117
No. surviving at 4 weeks* ... ..	—	1	7	37	57	—	102

\* Compiled 28th January, 1949

### Premature Infants according to Place of Birth.

Born in Maternity Institutions :—

(a) Under control of Borough Council (North-West Regional Hospital Board—from 5th July) ...	77	
(b) Other ... ..	37	
	—	114
Born at home ... ..		9
Total ... ..		123

## APPENDIX II.

### REPORT ON ILLNESS IN EARLY CHILDHOOD IN THE BOROUGH.

#### Introduction

There is less information about the amount of sickness among infants and young children than in most sections of the adult population, and the investigation described in this report is an attempt to fill some of the more obvious gaps in our knowledge. To be more precise, it aims to obtain a measure of the amount of illness in Luton occurring during the first two years of life and to relate the facts to certain social influences.

In an enquiry of this nature it is clearly impossible to obtain information about every departure from health or "normality" in young children, and a standard had, therefore, to be laid down to define what should be recorded. It was decided to restrict the recording of illnesses and accidents: (*a*) to those needing treatment in bed for at least 48 hours, (*b*) to those for which a doctor was called, and (*c*) to those leaving a recognised disability.

This definition does not automatically exclude the recording of a number of minor ailments and trivial departures from health, for some cautious parents seek advice on the slightest pretext. Instances of minor disorders have crept into the records, and doubtless a few illnesses which should have appeared have escaped notice (we cannot, for instance, be certain that all mild cases of gastro-enteritis have been recorded), but what is important from the particular point of view of this enquiry, it is unlikely that any serious illnesses have been excluded. This is borne out by a close correspondence between the information collected in the course of the enquiry and information obtained from other sources.\*

The group of infants (who are to be studied and followed-up for the first five years of life), comprises all infants born in Luton in 1945 and whose birth was registered in the Borough. They numbered 1897, but losses reduced the number at the end of the first year of life to 1,498 (49 infantile deaths and 350 infants who removed or could not be traced). The magnitude of the loss is attributable to the fact that the year 1945 was one during which a post-war resettlement of population was taking place on a large scale. Losses during the second year were much smaller, amounting to 63 infants who could not be traced. No death at 1-2 years was recorded.

The enquiry was conducted by means of a record card completed as regards housing circumstances and certain social particulars from existing departmental records, and as regards breast-feeding history, position in family and certain other particulars from existing hospital and clinic records. Finally, a record was compiled for illness and accident history by personal enquiries in the home. The enquiries were made by health visitors who obtained from the child's mother details of illnesses occurring during the first year of life, second year and so on, so far as the mother could recall them. The first visit was paid within a week or so of the child reaching the age of one year and thereafter annually.

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\* For example, during 1945, 36 cases of measles in children under one year were notified and the survey disclosed 39 cases.



The record of illnesses thus obtained was then checked against information obtained from notifications of infectious diseases and through records of local hospital admissions coming into the department at regular intervals.

Fairly complete social, housing and obstetric particulars relating to the group of infants selected were already available in the department before the enquiry began. This was so because a complete record relating to all births occurring in the Borough during 1945 was contained in "Report on Luton, 1945."

The present enquiry relates to the first and second years of life only, i.e., 1,498 records of infants at 0-1 year, and 1,435 at 1-2 years. The study is to be continued until the cohort of infants reach the age of 5 years when they will all be examined clinically as school entrants.

Because of the relatively large number of infants who could not be traced at the end of the first year the question arises whether the observed group of 1,498 infants is representative, i.e. whether illness rates in the unobserved group are likely to differ from rates in the observed group. The question of bias is a technical one, and it would be inappropriate to discuss it in a interim report such as this. It is sufficient to say that we are satisfied that the group examined was fairly representative in spite of 350 removals of infants under one year of age, as may be seen from Table I.

TABLE I.

	Observed Group (1,498)	Unobserved Group (350)*	Infant Deaths (49)
Legitimate ... ..	1,423 (95.0%)	278 (83.9%)	40 (81.6%)
Illegitimate ... ..	75 (5.0%)	53 (16.1%)	9 (18.4%)
Infants in fit houses ...	1,440 (96.2%)	323 (97.6%)	42 (85.8%)
Infants in unfit houses ...	58 (3.8%)	8 (2.4%)	7 (14.3%)
Social Classes I, II and III ...	906 (60.5%)	84 (25.4%)	16 (32.7%)
Social Classes IV and V ...	435 (29.0%)	46 (13.9%)	11 (22.4%)
Unclassified ... ..	157 (10.4%)	201 (60.8%)	22 (44.9%)
<i>Family Size</i>			
1 child ... ..	572 (38.2%)	173 (52.3%)	16 (32.7%)
2 children ... ..	508 (33.9%)	82 (24.8%)	12 (24.5%)
3 children ... ..	230 (15.3%)	32 (9.7%)	10 (20.4%)
4 or more children ...	168 (11.2%)	26 (7.9%)	7 (4.3%)
Not stated ... ..	20 (1.3%)	18 (5.4%)	4 (8.2%)
All ... ..	1,498	331	49

\* No information available in respect of 19 infants.

## THE FIRST YEAR OF LIFE.

### Recorded Illness

The total number of days of illness recorded during the first year of life amongst 1,498 infants was 12,732, or an average of 8.5 days per infant.

When the whole observed group is separated into two parts (1) infants who had two or more illnesses, or 99 days or more of illness, during the



year (referred to later as the "high incidence group"), and (2) the rest, i.e. infants who had only one illness or no illness at all, it was found that a great deal of the illness was experienced by a relatively small group of infants. This fact will not cause astonishment to most doctors, but the degree of concentration is remarkable. In the high incidence group there were 97 infants who experienced 6,140 days of illness during the first year of life, or an average 63 days per infant. That is to say, illness among 97 infants accounts for almost half of all the non-fatal illness recorded. Thus, the infants in this small group had seven times as many days of illness as the whole observed group and fourteen times as much illness (in days) as the remaining 1,401 infants.

It is noteworthy that the average number of days of illness experienced by 75 illegitimate infants was only 8, i.e. a figure slightly lower than that for the whole observed group. It should, however, be borne in mind that we know nothing of the experience of 53 illegitimate infants who were untraceable, and it may well be that in this presumably less stable social group the total incidence was high. Moreover, on general grounds it is impossible to be sure that records for illegitimate infants were as complete as those for legitimate infants because the unmarried mother is so often out of the home.

As regards duration, only 220 days of illness in the whole of the observed group were accounted for by illnesses of less than 7 days, the remaining 12,512 days of illness being attributed to incidents lasting 7 days and over. It would appear, therefore, that to be recorded an illness had, by and large, to last for a week or more. Alternatively, it might be, when trivial ailments are virtually excluded as they were in this enquiry, that if a child is ill at all its illness is of a fairly long duration. This explanation is suggested by the fact that 494 disease incidents lasting a week or longer were recorded, as against only 70 of shorter duration and it follows that this study is predominantly concerned with what may be called serious illness.

## Disease Incidence

Taking the whole group of 1,498 infants, 564 disease incidents were recorded during the first year of life, or an average of 1 incident for every 2.6 infants.

There are no big differences when the incidents are analysed according to the social class of the father. Taking first illnesses alone, there was one incident to 3.0 infants in social classes I, II and III; one to 4 infants in social classes IV and V; and a similar ratio for infants whose parents were unclassified. These figures might, it was thought, have concealed a concentration of the more serious incidents in one or other of the social classes, but an examination of the distribution of protracted sickness, which is used as a rough measure of severity, disclosed no evidence of such a concentration. When incidents of 14 days' duration and over are analysed separately it is equally clear that social class differences are not significant for incidents of long duration:

TABLE II.

## ALL DISEASE INCIDENTS BY SOCIAL CLASS AT 0-1 YEAR.

	Social Class	
	I, II and III	IV and V
Incidents of all durations ... ..	352	155
No. of infants per incident ... ..	2.5	2.8
Incidents 14 days' duration and over ... ..	228	110
No. of infants per incident ... ..	4	4

**Nature of Recorded Illnesses**

Table III depicts the distribution of illnesses classified under nine headings. The somewhat large number included under heading (9) "All other" consisted mainly of feeding difficulties, mild throat and ear conditions associated with teething, skin rashes and mild degrees of ophthalmia. Included also under this heading were 7 operation cases and 15 cases of chicken pox.

TABLE III.

DISEASE AND ACCIDENT INCIDENTS OF ALL DURATIONS  
AT 0-1 YEAR.

Disease	1st Illness	2nd Illness	3rd and over Illness	All Illness	
				No.	%
1. Pneumonia ... ..	16	5	1	22	4
2. Bronchitis ... ..	168	25	9	202	36
3. Influenza, colds and other respiratory infections ...	38	9	3	50	9
4. Gastro-enteritis ... ..	56	6	—	62	11
5. Measles ... ..	32	3	4	39	7
6. Whooping cough ... ..	51	10	—	61	11
7. Scarlet Fever ... ..	1	—	—	1	—
8. Accident—injury, burn or scald ... ..	4	4	—	8	1
9. All other ... ..	102	13	4	119	21
Total ... ..	468	75	21	564	100

Nearly half the recorded illnesses fall within the respiratory group under the first three headings, and 11 per cent. are accounted for by gastro-enteritis. The risk of contracting measles or whooping cough in Luton is shown to be relatively small during the first year of life. Thus, for every hundred infants, only three had suffered from measles by the time they were a year old, and only four from whooping cough. Added significance is given to this low rate of measles by the fact that the disease had an unusually high incidence in 1945. In the succeeding years, 1946 and 1947 when measles was less prevalent, notifications show that the measles



risk for children under 1 year was even less than that disclosed by the survey. The very small number of children who sustained accidents during the first year of life—only eight in the whole group of 1,498 infants—is noteworthy.

When the proportionate distribution of the causes of first and second illnesses is compared (we may ignore the third and subsequent illnesses for the figures are too small to be significant) it is apparent that they do not differ substantially.

### Family Size and Social Factors

As regards family size, there is a general belief that the infant born into a family of young children is at a greater risk of contracting infectious ailments than the only child. An analysis of illness histories according to family size confirms this. The only child appears to enjoy a small advantage during the first year of life.

TABLE IV.  
INCIDENCE OF INFANT ILLNESS ACCORDING TO  
FAMILY SIZE.

No. of Children in Family		No Illness	One or more Illnesses
Only child ... ..	600	425 (71%)	175 (29%)
Two children ... ..	508	342 (67%)	166 (33%)
Three children ... ..	222	144 (65%)	78 (35%)
Four or more children ... ..	168	104 (62%)	64 (38%)
All ... ..	1,498	1,015 (68%)	483 (32%)

An analysis under disease headings according to social class, and according to whether the house was classified as “fit” or “unfit,” showed no significant differences in either case. This is somewhat surprising. There is no evidence in Luton of an appreciable difference in the disease experience of infancy as between the social classes and the standard of housing enjoyed.

### Breast Feeding and Morbidity

In the course of the survey particulars were taken of the breast feeding history. The age at which breast feeding ceased and the connection between family size, social class and feeding history were also investigated. An account of this matter will be published elsewhere.

We are concerned here mainly with the relationship between infant morbidity and breast feeding, a subject which has been much discussed though often on the basis of inadequate fact. The first important finding is that the proportion of infants weaned at each month of age up to six months rises from the “no illness” to the “one illness” group, and again to the two or more illness group. At the age of six months, 44 per cent. of the “no illness” group were still having breast feeds, as against 29 per cent. of the “one illness” group, and 25 per cent. of the “two or more illnesses” group. (Table V).



TABLE V.  
AGE AT WHICH BREAST FEEDING CEASED FOR INFANTS  
WITH SICKNESS EXPERIENCE AS STATED.

Age in months B/F ceased	Infants with no Illness		Infants with one Illness		Infants with two or more Illnesses		All Infants	
	No.	%	No.	%	No.	%	No.	%
Under 1 month	254	25	109	28	30	40	393	26
1-2     ...     ...	77	7	42	11	11	15	130	9
2-3     ...     ...	65	6	45	11	9	12	119	8
3-4     ...     ...	80	8	41	10	4	5	125	8
4-5     ...     ...	57	6	18	5	—	—	75	5
5-6     ...     ...	45	4	23	6	2	3	70	5
6-7     ...     ...	132	13	38	10	9	12	179	12
7-9     ...     ...	125	12	31	8	3	4	159	11
9 months and over	195	19	45	11	7	9	247	16
Not stated     ...	—	—	1	—	—	—	1	—
Total     ...	1,030	100	393	100	75	100	1,498	100

It does not, of course, follow from these facts that failure to breast feed, or premature weaning, are etiological factors of infantile morbidity. They may be. But on the other hand, premature weaning and high sickness rates may both be associated with relatively adverse material circumstances and standards of parental care.

Some light is thrown on the question by a classification of sickness experience *excluding* infantile enteritis. This shows virtually no differences in the breast feeding histories of the infants in the three groups (no illness, one illness, and two or more illnesses).

When the breast feeding history of the 62 recorded cases of infantile enteritis is examined, the connection between the establishment of artificial feeding and gastro-intestinal disturbances is revealed as clearly as could be expected from general data without individual case studies. In only 8 instances was an infant who developed enteritis still breast-fed at the date of occurrence of the enteritis; in 47 instances the infant had ceased to be breast-fed; and in 7 the evidence was equivocal, i.e. the enteritis occurred at or about the time of weaning. A high proportion of the recorded enteritis occurred, as might be expected from its demonstrated connection with non-breast feeding, over the age of six months. Only 19 cases were recorded as occurring before the age of six months; 12 from six to nine months; and 31 (or half of all the cases) at the age of nine months and over.

### THE SECOND YEAR OF LIFE.

Since this is only an interim report on the first stages of a survey with some years to run, a detailed account of the findings at one to two years would be premature. We do not propose, therefore, to present an analysis of findings relating to social class, duration of illness, etc., as was done for the first year of life; though we shall refer to certain conclusions drawn from them. We do, however, include a table showing the proportionate distribution of incidents for comparison with the corresponding table at 0-1 years.

## Recorded Illness

The total number of days of illness recorded during the second year of life among 1,435 children was 11,854 days, or an average of 8.27 days per child—a figure which is almost the same as for the first year of life (8.5). The number of children in the high incidence group was 115, and between them they experienced 5,471 days of illness or an average of 47.6 days per child. Apparently the concentration of illness disclosed in the first year of life has its counterpart in the second year. Almost half the days of illness experienced are attributed to 8 per cent. of the survey group.

A question we have had in mind is whether a small group of children make a big contribution to the total volume of sickness during the first 5 years of life. It is, of course, impossible with the material to hand to answer this question beyond the age of 2 years, but it is already cogent to ask how far the high incidence group at 1-2 years was made up of children who were also in the high incidence group during the first year of life.

The facts in this regard can be summarised as follows :

(1) One child in 17 who had no illness during the first year fell into the high incidence group of the second year ; whereas, 1 child in 7 in the high incidence group of the first year was also in the high incidence group of the second year.

(2) One child in 9 who was ill during the first year fell into the high incidence group of the second year, and 1 child in 2.5 who was ill during the first year was also ill during the second year.

(3) One child in 2.4 in the high incidence group of the first year had an illness during the second year, whereas 1 child in 3.4 who had no illness in the first year was ill during the second year.

It is too soon to discuss the significance of these facts, but it does appear that a group of infants with a high sickness rate in the first year of life are likely to have more than average sickness during the second year.

## Nature of Recorded Illness

Table VI sets out the proportionate distribution of illness classified under the same headings as used at 0-1 year. Noteworthy features are the decline in importance of the respiratory diseases and gastro-enteritis and the increased proportion of incidents attributable to measles and accidents. The number who suffered from measles is still small but it will be recalled that the disease had a low incidence in Luton in the year 1946-47. (See above).

Group (9) “ all other ” is again big. Included under this heading are : 27 Chicken pox, 10 Tonsillitis, 2 Cerebro-Spinal Fever, 2 Nephritis, 3 Ottorrhoea, a number of minor skin conditions, inflammations and abscesses, and 10 operation cases (4 hernia, 2 mastoiditis, 4 congenital malformations).



TABLE VI.

DISEASE AND ACCIDENT INCIDENTS OF ALL DURATIONS  
AT 1-2 YEARS.

Disease	1st Illness	2nd Illness	3rd and over Illness	All Illnesses
1. Pneumonia ... ..	11	5	1	17 (3%)
2. Bronchitis ... ..	74	22	6	102 (17%)
3. Influenza, colds and other res- piratory infections ... ..	15	8	3	26 (4%)
4. Gastro-enteritis ... ..	26	4	1	31 (5%)
5. Measles ... ..	178	13	2	193 (31%)
6. Whooping cough ... ..	43	10	4	57 (9%)
7. Scarlet Fever ... ..	1	—	—	1 —
8. Accident—injury, burn or scald	13	2	1	16 (3%)
9. All other ... ..	119	46	10	175 (28%)
Total ... ..	480	110	28	618

The same consistency between the social classes was disclosed at 1-2 years as at 0-1 year. Whether total morbidity or individual diseases (or groups of diseases) are studied there is virtually no difference between the experience of the social classes as defined according to the Registrar-General's classification. A single minor exception to this generalisation is a higher incidence of accidents in social classes I, II and III as compared with social classes IV and V. Of 16 reported accidents only four were amongst children in social classes IV and V, i.e. the incidence of accidents in social classes I, II and III was proportionately about 50 per cent. higher.

The information obtained does not enable us to account for this unexpected fact. It is, however, obvious from the records that the accidents in classes I, II and III occurred in the home. There were 1 serious burn and 2 minor burns, 7 fractures, 1 accidental poisoning with ammonia and 1 "needle in foot."

### Hospital Treatment

The demand made on hospital beds by the age group studied has considerable practical interest.

Our records are of children admitted to Luton hospitals only—the Luton Children's Hospital, the Luton and Dunstable Hospital (General), St. Mary's Hospital (Public Assistance) and the Borough Isolation Hospital. It cannot be claimed that they include every case admitted to a hospital, since a few children may have been treated at hospitals elsewhere. We are satisfied, however, that the number so treated is small, amounting in all likelihood to no more than half a dozen.



TABLE VII.

HOSPITALISATION OF LUTON CHILDREN BORN  
IN 1945.

Reasons for Admission	0-1 year	1-2 years	Reasons for Admission
<i>Malformations</i> ... ..	13	8	<i>Malformations</i>
Pyloric stenosis 6			Pyloric stenosis —
Hare lip 2			Hare lip —
Imper. Anus 1			Imper. Anus —
Hernia 3			Hernia 3
Hydrocephalus 1			Hydrocephalus —
Rectal prolapse —			Rectal prolapse 1
Def. of digits —			Def. of digits 2
Cleft palate —			Cleft palate 1
Sinus —			Sinus 1
<i>Other Surgical</i> ... ..	8	13	<i>Other Surgical</i>
Intussusception 2			Intussusception —
Ascites 1			Ascites —
Abscess 2			Abscess 3
Injury (inc. fractures) 3			Injury (inc. fractures) 7
Mastoiditis —			Mastoiditis 2
Swallowed foreign body —			Swallowed foreign body 1
<i>Feeding difficulty and malnutrition</i>	13	—	
<i>Pneumonia and bronchitis</i> ...	9	5	
<i>Diarrhoea and vomiting and enteritis (excluding dysentery)</i> ...	11	1	
<i>Other Acute Infections</i> ... ..	11	4	<i>Other Acute Infections</i>
Pemphigus 7			Pemphigus —
Whooping cough 2			Whooping cough —
Ophthalmia 1			Ophthalmia —
Gonococcal vaginitis 1			Gonococcal vaginitis —
Cerebro-spinal Fever —			Cerebro-spinal Fever 1
Scarlet Fever —			Scarlet Fever 1
Dysentery —			Dysentery 2
All other ... ..	3	2	
Total ... ..	68	33	

*Note.*—100 children admitted for circumcision at 0-1 years and 3 at 1-2 years are not included.

The average duration of in-patient stay for the 68 admissions at 0-1 year was  $25\frac{1}{2}$  days ; for the 33 admissions at 1-2 years, 10 days. That is :

Number of patient-days 0-1 year = 1,744

Number of patient-days 1-2 years = 328

It would be premature to enlarge on the significance of these figures, but it is apparent that the demand on hospital accommodation by the 0-2 group is small. Six beds or so would be enough for Luton.

Whether cases treated in hospital, or all morbidity incidents are reviewed, the small number of post-natally acquired conditions likely to leave a residual disability is arresting.

## Review

The limitations of a survey of the kind described are fully recognised. Certain factual information of a general nature not otherwise available has been afforded, but the survey raises many unanswered questions. It suggests, for instance, so far as the Borough of Luton is concerned, that social class in relation to child morbidity has not the significance properly attributed to it in the early 'thirties, and raises the question of the relationship between social class and standards of child care. We need to know a great deal more about the individual circumstances of infants in the "high incidence" group as compared with infants in the "low incidence" group. We should like to be able to say, for instance, whether the high incidence group is mainly born or mainly made, whether even during the first year of life inborn proneness to disease plays a greater part than adverse circumstances within the limits of variability of a relatively prosperous industrial community. These and similar questions cannot be answered without detailed case studies, and such studies are being undertaken as a complement to the general statistical enquiry.

## SUMMARY.

1. The Report describes the results, for the first two years of life, of a survey of infantile morbidity.
2. At 0-1 years, the average number of days of sickness is 8.5 ; and at 1-2 years, 8.3 days.
3. In both age groups a large proportion of sickness, measured in days, is concentrated in a small group of children.
4. Details are given for each year of age of the diseases and accidents suffered.
5. Social class of parents, family size, and housing standards do not appear to influence sickness experience materially.
6. Six or so hospital beds are enough to meet Luton's requirements for sick and injured children up to the age of 2 years.
7. It is shown that at each month of age up to six months infants who are weaned have more sickness than infants still at the breast. The difference is accounted for almost entirely by the different incidence of infantile enteritis.
8. It appears that a group of infants with a high sickness rate in the first year of life are likely to have more than average sickness during the second year.